STANDARD FOUR—THE ACADEMIC PROGRAM

DESCRIPTION

The Academic Program

As UMass Dartmouth evolves from an undergraduate institution with nearly half of its students enrolled in liberal arts and sciences to a regional research University, both personalized, high-quality education and faculty and student engagement in research and the community remain central to its Mission. Undergraduate degrees are offered in the liberal arts and sciences and the performing arts as well in professional programs in engineering, nursing, business and visual arts. Many programs integrate the strategic focus on civic responsibility by providing internships, service learning, community research or other activities embedded in the community. Master's and doctoral-level programs are expanding. Undergraduate and graduate degrees and non-degree programs are also offered through the Division of Professional and Continuing Education (PCE). A number of certificate programs are offered for credit at both the post-baccalaureate and post-master's levels. The distribution of credit hours by college, program and major is provided, as well as enrollments including concentrations. (See Data First Tables.)

Academic oversight is a collaborative endeavor of faculty and academic administration in which program revisions and proposals for new programs, as well as course proposals, are subject to established review procedures. Curricular and program changes typically are initiated at the department level by the department curriculum committees. Changes to existing courses, introduction of new courses, and modification of the degree requirements within the major require curriculum committee approval at the departmental level. Changes to courses that affect students in other departments or colleges must by recommended by the relevant college curriculum committee and the University Curriculum Committee as well. Membership on these committees is defined by the collective bargaining agreement. Following curriculum committee recommendation, proposals are subject to the recommendation of the dean of the college or school, and the approval of the Provost. The Provost's website details these procedures. These policies and procedures apply to all academic programs and courses, regardless of the location or mode of delivery, including those programs offered by PCE.

Coherence in academic program goals, structure, and content flows naturally from this oversight system. Descriptions of programs published in the University's Undergraduate/General Catalog and on department and college websites illustrate a planned sequence of progressively challenging courses that require mastery of content as well as the structure of the discipline. These planned sequences of learning objectives are illustrated in both tightly structured disciplines such as Engineering and the more flexible options in a program such as English. Policies and requirements for admission are presented on the Admissions website. Degree requirements for specific programs are presented in the Undergraduate/General Catalog. Department websites also provide information about advising and other resources designed to improve retention; see, for example, Biology. The program approval process, with its multiple review stages as well as periodic program/degree reviews, assures that academic programs meet the institution's standards of quality for both traditional programming and online and other offerings of PCE.

Departmental assessment plans enumerate learning outcomes for students and identify the means by which outcomes are to be assessed. Requirements for all programs appear in the catalog and on some department/program websites; nearly all programs also publish learning goals as shown in the appended Series E tables. The level of detail varies, but learning goals include the knowledge, intellectual and academic skill, and methods of inquiry to be acquired. Professional degree programs, such as those in Visual and Performing Arts, also incorporate creative abilities to be developed, while those in Nursing include clinical rotations to facilitate students' mastery of career-specific practices. Departments maintain and make available, as appropriate, records of student progress toward degree attainment. The December 2009 update of the PeopleSoft student information system provides an interactive degree audit that identifies all major, General Education and college distribution requirements.

Degree programs integrate courses required for the major with General Education, and any college specific distribution requirements. Depth is provided through a minimum of 30 credits in core courses and electives required in each major; breadth is insured by the General Education distribution that requires students to take courses across nine broad areas of competence, detailed later in this chapter. The Bachelor of Arts degrees also require that students demonstrate competency in a foreign language at the 200-level. Many programs now include required capstone projects that display sequential progression and synthesis of learning.

Information technology and information resources are available through Computing and Information Technology Services (CITS) and the Library. Information technology resources include both computer labs and computer-equipped classrooms, as well as a Learning Commons under development in the Library. CITS provides a range of services and programs to support student and staff use of technology; CITS also oversees the learning management system (Blackboard-Vista). The Library offers course-related library instruction at all levels from first-year English through graduate level to familiarize students with its many online databases and the procedures for accessing resources through many other institutions. Instruction emphasizes information literacy objectives to evaluate the validity of online information as well as the means of using these resources effectively. Library instruction is delivered in face-to-face and asynchronous online formats.

Undergraduate students achieve collegiate-level skills in the English language by taking Gen Ed required writing courses (ENL 101-102), and through advanced-level writing offered within specific courses in the major or through courses in the English department designed to support that Gen Ed requirement. For example, the English department offers Technical Communication, Business Communication, and Writing in the Sciences for students in engineering, business, biology, and chemistry programs. Other programs address the requirement in different ways.

As noted above, UMass Dartmouth develops and approves its programs through a process in which faculty play a lead role in departmental, college, and University curriculum committees. The required departmental outcomes assessment examines both the processes for assessing learning outcomes in the program and the results of those assessments, providing the opportunity for incremental curricular modifications. In addition to these annual program assessments, all programs are subject to a cyclical review either by external accrediting agencies or by the UMass System's Academic Quality Assessment and Development (AQAD) program. Program reviews under both AQAD and the external accrediting agencies are managed by the respective colleges

and departments under supervision of the college dean; both require detailed self-studies, site visits by external reviewers, and development of action plans that address issues raised during the self-study process. (See Institutional Characteristics.)

Addition or deletion of programs is consistent with institutional mission and capacity. Programs/options eliminated since the 2000 self-study include: two options in Chemistry and Biochemistry (one in pre-medical that has been replaced by an interdisciplinary advising pathway and one in environmental chemistry as focus shifted to graduate programs); Mechanical and Electrical Engineering Technology degrees; the undergraduate curriculum in Teacher Certification (now a post-baccalaureate certificate); Textile Science (replaced by two options in Materials Science); two post-baccalaureate certificates in Nursing; and all but one option in Music. In addition, the German minor suspended admissions pending a review by the Foreign Literature and Languages Department. When programs are eliminated or program requirements are changed, the institution makes appropriate arrangements for enrolled students so that they may complete their education with a minimum of disruption.

The institution allocates resources on the basis of its academic planning needs and objectives. For example, in alignment with the strategic planning goal to increase graduate enrollment, funds were allocated to develop a state-of-the-art Research Building and to upgrade laboratory facilities in Biology, Chemistry and Biochemistry. To meet the goals of engaging students, faculty and staff in the community and preparing excellent K-12 teachers and leaders, resources were allocated to establish the School of Education, Public Policy, and Civic Engagement (SEPPCE). Program elimination and consolidation take place in concert with the planning and development of new programs (as required elements in the new-program proposal process) or revision of current programs; academic program realignment thus informs reallocation of resources. The Engineering Technology majors, for example, were eliminated, and those resources were reallocated to support the first UMass Dartmouth PhD program in Electrical Engineering. Programs that were added in response to changing needs and prioritization of resources include the bachelor's degree programs in Women's Studies, previously a minor, and Crime and Justice Studies, formerly an option in Sociology.

UMass Dartmouth conducts instructional programs at several off-campus instructional sites. In New Bedford, these include the CVPA Star Store for the Arts and the School for Marine Science and Technology (SMAST), as well as the Advanced Technology and Manufacturing Center (ATMC) and a PCE Outreach Center in Fall River. The Center for University School and Community Partnerships and the Center for Marketing Research, the Kaput Center for Research and Innovation in STEM Education share space with some SMAST programs in Fairhaven. PCE also offers programs at Cape Cod Community College and at a distance-learning site on Martha's Vineyard. Both non-credit and undergraduate credit programs are offered at all sites except SMAST, which offers graduate programs only. All facilities where instruction is offered meet CIHE standards and policies in terms of instructional capacity, access, support and technology. Academic programming offered for credit at these sites is governed by the same policies and procedures as programs on the Dartmouth campus, with departments responsible for hiring faculty and participating in the decisions regarding what courses and programs to offer. The University owns the SMAST campus facility in New Bedford; has ten more years on a lease-to-purchase agreement for the Star Store building; and longer term leases on the ATMC, Fall River PCE Center, and the Fairhaven complex.

In addition to administering off-campus sites, UMass Dartmouth offers both courses and programs online as part of UMass Online, a UMass system-wide network that provides both the technology platform and marketing support to each member campus. Online education is managed under the auspices of PCE. Determining what credit degree or certificate programs should be offered online or at off-campus sites is a collaborative process of faculty and academic administration and PCE. Issues of curriculum, learning objectives and academic requirements are under the purview of the faculty according to the policies and procedures that govern these issues. PCE's roles are to connect with business, industry and community stakeholders to assess market needs and manage logistics of scheduling, marketing, and budget.

Students participating in off-campus, online, and other alternative delivery courses have access to a range of learning resources. The Library supports student research at a distance through its electronic resources, available online training sessions, interlibrary loan, and document delivery. In addition, the Library also coordinates efforts with PCE to offer appropriate hours during non-traditional terms, such as summer and intersession.

Undergraduate Degree Programs

UMass Dartmouth's undergraduate degree programs include 38 baccalaureate programs in specific disciplines as well as a program in multidisciplinary studies. Some departments also offer undergraduate certificate programs. UMass Dartmouth undergraduate students also have the opportunity to choose one or more of a broad range of minors and options offered by the various departments. Credits required for baccalaureate degrees range from 120 (Liberal Arts degrees) to 130 (professional degrees) and from 18 to 25 credits for academic minors. The catalog, curricular guides used by many departments, and individual student advising sheets outline the distribution of those credits among required program/major, support, Gen Ed, and elective courses. Academic advisors help ensure that students make reasonable and productive course selections and progress toward completing their degrees. Both the undergraduate certificate and degree completion program in Women's Studies are offered fully online.

Degree requirements for undergraduate programs are designed to give students an expansive introduction to broad areas of human knowledge and methods of inquiry through 42 credits of General Education courses required for every degree. At the same time, students gain in-depth knowledge of an academic or interdisciplinary area through a sequenced program that builds from lower (100 and 200) level introductory courses to in-depth coverage of specialized areas in upper (300 and 400) level courses. Completion of the 100-level courses, intended for first-year students, functions as a general prerequisite for progression to the sophomore level, which in turn provides a deepening cognitive basis for 300-400 level courses. All programs require that students complete a minimum of 30 credits at the 300-400 level, ensuring that students reach an appropriate level of understanding of both the content and methods of inquiry of the discipline. All programs also allow students to take one or more unrestricted elective courses, and some programs, such as Engineering, feature carefully selected clusters of upper-level electives designed to provide intensive study in a disciplinary or interdisciplinary area.

Numerous opportunities for participation in programs that enhance the academic experience include the Honors Program, internships and co-op, undergraduate research, study abroad and study away, and other experiential learning. Service Learning is an evolving pedagogy that adds

experiential learning and fosters civic engagement within the undergraduate academic experience. Each of these programs is designed to advance learning outcomes by challenging students to apply knowledge outside of the classroom. Small, intellectually stimulating classes and opportunities for undergraduate research are the hallmarks of the Honors Program, part of the Commonwealth Honors Program, a statewide higher education initiative.

In addition, there are special advising pathways for students interested in pre-law or pre-health/pre-medical studies. UMass Dartmouth has had an articulation agreement with Southern New England School of Law (now the UMass School of Law-Dartmouth following approval by the Board of Trustees and the Department of Higher Education) that provides a "fast track" allowing students to complete the baccalaureate and law school in six years rather than seven. In Fall 2009, a Pre-Med advisor was appointed to improve Pre-Med advising across the departments and to develop enrichment programs. In addition, the four UMass campuses and UMass Medical School have agreed to develop a Baccalaureate-to-MD program, with the first cohort of twelve students, three at each campus in the system, to be admitted in Fall 2011.

General Education

The General Education program, implemented a decade ago, is based on a set of learning objectives in nine comprehensive areas that embody the attributes of an educated person: Cultural & Artistic Literacy; Ethics & Social Responsibility; Global Awareness; Diversity; Information & Computer Literacy; Mathematics; Natural Science & Technology; Written Communication; and Oral Communication. These areas are defined and the requirements are presented on the General Education website.

The Gen Ed program operates on a distribution model, in which one or more specific courses are certified to fulfill the requirement. For example, to meet the Mathematics standard, students may select any college level course in math; for the Science & Technology standard, all courses in Biology, Chemistry, Civil, Electrical, General and Mechanical Engineering, Computer Science, Medical Laboratory Science, and Physics, plus a prescribed list of other courses, meet the requirement. Courses in Visual and Performing Arts, Foreign Literature and Languages, History, Philosophy, Portuguese, and English meet the requirement for Cultural & Artistic Literacy. ENL 101 and 102 fulfill both the Tier I Written Communication standard and, by virtue of the information technology and computer skills integrated into the curriculum, the Information and Computer Literacy standard. For Tier II Written Communication, the Gen Ed policy mandates a writing-intensive course, but the Tier II Information Literacy requirement provides flexibility by directing departments to establish the appropriate skill level for their discipline and to identify both a course sequence and timeline whereby students obtain these skills. The Faculty Senate has also approved specific learning outcomes for each of the areas, with the exception of Oral Communication and Information & Computer Literacy. In the case of the former, direction was given to the academic departments to develop learning processes and outcomes appropriate to their discipline through course modules, a course or sequence of courses, or by designating a course in another department. The process for ensuring attainment of Tier II Information and Computer Literacy has not been specifically addressed. Students are required to complete 42 credits in order to fulfill the Gen Ed requirements. The Gen Ed Committee meets regularly to consider new courses for inclusion on the approved list posted on the Registrar's website which is quite extensive, providing many options for students to meet the requirements.

As part of the institution's ongoing commitment to improve assessment, a task force was charged in Spring 2008 with researching assessment models to ensure that students who complete the Gen Ed requirements demonstrate competence in the following areas: written and oral communication, scientific and quantitative reasoning, critical thinking, and skill in continued learning and information literacy. The task force presented its proposed recommendations to the Faculty Senate, which were approved in May 2008. Gen Ed assessment instruments include the National Survey of Student Engagement (NSSE), the Measure of Academic Progress and Proficiency (MAPP) and a supplemental set of survey questions, reflective essay assignment, and rubric-scored assessment of students' writing in required first-year English courses. The MAPP and the collection of reflective essays were implemented in the Spring 2009 semester, while the NSSE and the first-year writing assessment have been administered on a regular basis for several years. The task force also recommended to the Faculty Senate and the Provost the appointment of a Director of General Education. With the approval of this position in Spring 2009, the Director assumed responsibility for overseeing the assessment process and for presenting assessment outcomes to the Gen Ed Committee, for use in considering possible revisions to the program. The Director presented a report on 2005 NSSE data to the Committee in Spring 2009. To date in the 2009-2010 academic year, he has presented reports on the assessment of the first-year English writing program, 2008 NSSE data, the initial MAPP administration, and the assigned reflective essay.

In a related initiative during academic year 2008-2009, a separate task force worked to refine the University's definition of an educated person. The task force considered the Mission and Vision Statements and Strategic Plan, explored and discussed changes in society in general and in the student population, and engaged the campus community in the discussion. The resultant Integrated Student Learning Outcomes (ISLO) statement received approval of key campus bodies, including the Faculty and Student Senates. The ISLO statement will support the ongoing discussions of revitalizing and revising General Education.

The Major or Concentration

Each major or area of concentration affords the student the opportunity to develop knowledge and skills in a specific disciplinary or clearly articulated interdisciplinary area above the introductory level through properly sequenced course work as illustrated in syllabi from sequences of courses drawn from across the institution. (See Workroom for sample syllabi.) Although there is variation among programs, all majors and concentrations require that students achieve depth of knowledge through structured requirements. For example, Political Science requires 39 credits in the discipline divided among foundation, internship, and specialized courses at the 200 or higher level, whereas professional programs such as engineering require up to 60 credits in engineering courses. The newly approved, interdisciplinary Liberal Arts major requires that students complete concentrations of 15 credits each in both the Humanities and the Social Sciences, plus 6 additional credits in foundation and capstone interdisciplinary courses in Liberal Arts. In Visual Design, programs comply with guidelines for accreditation by the National Association of Schools of Art and Design (NASAD) by completing studies in a major studio area comprising 25-35% of total credits, plus supportive courses in art, design, and craft for 20-30%, and studies in art and craft history for 10-15%. In these diverse ways, students gain depth and expertise.

Beyond mastering disciplinary knowledge, students learn the methods of inquiry pertinent to their respective fields of study. For example, History, Nursing, and Political Science as well as several other departments offer specific courses in research methods in those disciplines. Capstone projects, required in many programs, also require the use of these discipline-specific methods of inquiry. Programs that provide professional training, such as engineering and nursing, by design explicitly connect curricular content and effective practice in that particular field. Through projects, capstone courses, and practica, graduates demonstrate in-depth understanding of an area of knowledge or practice, effectively use its principal information resources, and articulate its interrelatedness with other areas.

Graduate Degree Programs

PhD program development has been the focus of graduate program growth in the last decade, with six new doctoral programs enrolling students since the last NEASC accreditation in 2000. Developed in areas of faculty and institutional strength, these programs also respond to clearly identified needs. UMass Dartmouth offers four independent campus-based programs and three programs in collaboration with other UMass campuses. Independent programs include Electrical Engineering (with an associated option in Computer Engineering), Luso-Afro-Brazilian Studies and Theory, Mathematics Education, and Nursing. The collaborative programs are Marine Science and Technology (system-wide), programs/options in Biomedical Engineering and Biotechnology (Boston-Dartmouth-Lowell-Worcester) and Chemistry (Lowell and Amherst).

A similar trend in growth of master's programs is reflected in the 26 programs/options in Art, Elementary and Secondary Education, Business Administration, several areas in Fine Arts, Portuguese, Professional Writing, Psychology, Public Policy, Biology and Marine Biology, Chemistry, Engineering and Textiles Science, Marine Science and Technology, Nursing, and Physics. In addition, there are post-baccalaureate and nine post-master's certificate programs in various areas such as Business, Nursing, Psychology, and Environmental Policy.

The newer graduate programs – in Public Policy (MPP), Mathematics Education (PhD), Nursing (PhD), and Luso-Afro-Brazilian Studies and Theory (PhD) – reflect UMass Dartmouth's strategic goals to respond to key regional/national issues, to increase graduate enrollment in professional master's programs, and to achieve Carnegie Doctoral/Research Institution designation. Ongoing plans to develop new degrees include an EdD/PhD in Educational Leadership, a doctoral degree in Nursing Advanced Practice (DNP), a multidisciplinary PhD in Engineering and Applied Science, and an independent PhD program in Chemistry and Biochemistry. Concurrently, professional science master's degree options are under development or consideration in Marine Biology and Marine Sciences, Biotechnology, Medical Laboratory Science, Applied Physics, Software Engineering, and Textile Chemistry and Technology. The institution's major teacher preparation program at the Master's level (MAT) has also recently been revised.

All of UMass Dartmouth's current PhD programs are research-oriented programs that require a qualifying exam, a thesis proposal defense, and a doctoral dissertation. Master's programs in Biology/Marine Biology, Marine Science and Technology, Chemistry, Clinical Psychology, and all the master's programs in the College of Engineering prepare students for both research and professional practice. These programs have thesis options for students focusing on research, and non-thesis options for students pursuing professional practice. The master's program in General

Psychology requires a thesis and prepares students for research careers, while the Master's in Clinical Psychology offers students a choice between a thesis and a clinical seminar sequence with an oral or written exam. Programs in Art Education, Business Administration, Nursing, Arts in Teaching, Professional Writing and Public Policy are designed to prepare students for professional practice and do not require a research thesis. All master's programs have a required capstone experience through which students must demonstrate mastery of subject material at a level advanced beyond their undergraduate degree. For non-thesis options the capstone experience most often takes the form of a comprehensive exam or an experiential learning component such as an internship. The Master of Fine Arts Degree, a terminal degree that prepares students for careers as practicing artists both inside and outside of academia requires both written and visual theses.

Institutional support for graduate programs has increased as graduate programs have grown. Research space for scientific and technical fields has increased significantly with the construction of the Advanced Technology and Manufacturing Center (ATMC) in Fall River in 2001 and a 22,000 ft^2 research building on campus that supports interdisciplinary research in the life sciences in 2007. The ATMC encompasses 20,000 ft^2 of space that supports business incubation as well as research space for graduate programs in Engineering, Chemistry and Business. Moreover, the acquisition of 23,000 ft^2 of space in the Mill Bridge office park in Fairhaven provides research space for Marine Science and Technology, Math Education, and Marketing. The state-of-the-art studio facilities at the Star Store in New Bedford support faculty and graduate student research and creative activities. On campus renovated spaces that formerly supported undergraduate textiles instruction have been reconfigured to provide office and student space for the PhD programs in Nursing and Biomedical Engineering/Biotechnology.

Support for teaching assistants (TAs) was substantially increased in Fall 2009 and new policies were implemented to encourage departments to use TAs for laboratory instruction and recitation sections in order to free faculty time to teach graduate courses and pursue research activities. Faculty research in the sciences and engineering is also supported by grant-funded research assistants (RAs) and post-doctoral fellows. Currently, the combined resources allocated by the Provost and faculty grant-based support provide $2.3 million in TA and RA stipends add $1.2 million in tuition and fee waivers. The position of Associate Provost for Graduate Studies was established in 2008 in order to provide clear leadership for graduate programs, and the Director of Graduate Marketing and Recruitment was hired as well.

Graduate programs also contribute to the undergraduate experience, as graduate courses have become more available to advanced undergraduates for inclusion in their undergraduate degree program. The University has developed eight accelerated bachelor's/master's programs, in which students are allowed to begin their master's degree study in their senior year and count specific courses toward both degrees. Research activities, which grow out of graduate research, have been incorporated into the undergraduate experience in a number of departments through the offering of research experience courses at the baccalaureate level. Graduate students are increasingly involved in the delivery of laboratory or studio courses, thereby giving the graduate students valuable teaching experience and undergraduates the opportunity to meet and work with graduate student role models.

Graduate programs are governed through processes that parallel those for undergraduate education, except that a body, the Graduate Council, makes recommendations focused on graduate-level issues. The Associate Provost for Graduate Studies works with department chairpersons and deans, individual graduate program directors, and the Graduate Council to plan, evaluate, and modify programs. Program revisions and the establishment of new programs are subject to the same curricular processes as undergraduate programs. A central Graduate Office oversees admissions and provides enrollment services.

With very few exceptions, only faculty prepared at the doctoral level (or, in the studio arts, with MFAs) teach and direct projects, theses, and dissertations in graduate programs. Tenure system faculty conduct the vast majority of graduate instruction; this is supplemented by practicing professionals who provide instruction in professional graduate programs such as those in Education, Nursing, and Medical Laboratory Science.

Integrity in the Award of Academic Credit

The University plans, reviews, and approves the content of courses and programs primarily through departmental, college, and University curriculum committees and addresses issues of program quality, student qualifications and progression, and academic policies through standing committees of the Faculty Senate, including the Admissions, Academic Ethical Standards, Student-Faculty Academic Affairs, and General Education Committees. Department chairs work with faculty to determine course offerings each semester. The active participation of faculty is designed to ensure the quality of all courses and programs, regardless of location of offering, modality, or delivery schedule. All degree and certificate programs have stated requirements included in the online and print catalogs. Courses are offered on a regular schedule, and class schedules are published prior to the early registration period each semester. Policies regarding academic honesty are published in both the online Faculty Handbook and Student Handbook. Student learning outcomes have been developed in each department and serve as the criteria to evaluate the award of academic credit for transfer, study abroad, internships, independent study and service learning. Policies regarding the award of special types of credit (including AP, CLEP, and military training) are published by the Admissions Office. Credit towards graduation is not awarded for remedial or pre-collegiate level work. Placement policies are designed to prevent students from enrolling in courses for which they lack appropriate preparation. Policies for continuation in, dismissal from, or readmission to academic programs are published in the Student Handbook and the Undergraduate/General Catalog. These policies are developed by faculty and approved by the Faculty Senate. Assistant/associate deans within the colleges administer these policies and monitor their effectiveness. Online courses follow the same semester, intersession or summer session schedule as face-to-face classes.

Assessment of Student Learning

Every undergraduate academic major and each graduate program is required to have a student learning assessment process that includes published comprehensive learning outcomes, processes for evaluating students' achievement of the outcomes, and means of using the findings to improve the program. Each department is expected to maintain a written assessment plan; these are submitted to the dean of the college on an annual basis. While learning outcomes are presented in the catalog for every program, many programs also use the web, a student handbook, or other means of communicating these expectations to students. Approximately half of all undergraduate programs are covered by external accrediting agencies and conduct their

learning assessments in alignment with their respective accreditation standards and processes. Those not covered by external accreditation develop their own assessment programs. The Provost has emphasized the importance of this by issuing an Outcomes Assessment Policy in 2004 that makes deans responsible for assessment within each college. In turn, the deans have appointed an assistant/associate dean or granted release time to a faculty member to be responsible for assessment in each of the colleges. The Office of Institutional Research and Assessment (OIRA) provides data to support these assessment efforts.

A review of the Series E Inventory of Educational Effectiveness Indicators reveals substantial progress across all programs and levels; still, some programs are further along than others and not all have yet experienced the full cycle, from framing criteria and assessing outcomes to applying results to make improvements. The Series E table shows that all programs have identified formal learning outcomes. A number of programs require capstone courses or other culminating activities that demonstrate a graduate's achievement of the program's learning objectives. While this element is a requirement for graduate programs, it is currently under discussion as a Gen Ed requirement that would apply to all programs. Examples of these capstone activities include the College of Engineering's Senior Design Projects and the College of Visual and Performing Arts' Senior Exhibitions and Senior Jury. The Charlton College of Business and some departments in College of Arts and Science require senior seminars as capstone experiences. Virtually all programs have initiated activities that gather data about student learning, with some variation in their breadth and coverage. These activities range from course-embedded assessments to the use of progressive evaluation instruments to the use of critiques and juries (in Visual and Performing Arts), clinical evaluations, and portfolios. While many course syllabi list expected student learning outcomes, this is not a universal practice.

At this time, programs other than degree programs, such as minors, certificate programs, and enrichment programs such as Honors, have not undertaken the process of developing learning outcomes assessments. In 2008-2009, the Honors program began the review process by examining its structure and revising its curriculum to include HON 101, an introductory seminar, and HON 301/302, an honors research seminar. There are various experiential learning opportunities at UMass Dartmouth, which include internships at local sites, co-op learning, study away and study abroad opportunities; of these, only co-op learning has established learning outcomes. In support of the strategic goal of student engagement in the community, the University has recently begun the process of establishing a required Service Learning curricular component that will integrate academic learning with civic engagement activities; assessment plans for these activities are in the initial stages of development.

The quality and currency of programs is reviewed on a regular basis, as noted in the Planning and Evaluation chapter. Programs that are not subject to external evaluation are reviewed on a seven-year cycle through the AQAD process. Results of these reviews are used to inform curricular revision and development, to direct recruitment and retention efforts, and to plan for emerging trends in the labor force and graduate study. For example, following the AQAD review in 2002, the Math Department revised its curriculum to engage students more actively in learning. The resultant NSF-funded CSUMS (Computational Science Training for Undergraduates in the Mathematical Sciences) project provides numerous opportunities for undergraduate students to work collaboratively, to engage in research, and to present their research findings at regional mathematics conferences. The 2009 Math AQAD external review

commended the Math Department on the improvements made since the previous review. Recently, campus and UMass-level administrators have stressed that the AQAD program review process must include results from student learning assessment conducted at the department level.

APPRAISAL

The Academic Program

UMass Dartmouth offers a broad range of undergraduate and graduate programs of high quality. Recent curricular and program revisions have provided students with additional options and greater access to higher education. Examples include the new program in Applied Behavioral Analysis in the Psychology Department, offered through PCE to provide broad access to practicing professionals, and the online degree program and certificate in Women's Studies.

Undergraduate Degree Programs

Undergraduate programs are characterized by coherency and integrity in the curricula. The strong involvement of faculty in all aspects of curriculum development, review, revision and evaluation ensures that programs, regardless of location, modality, or delivery schedule, maintain the same high level of quality. Flexible 3+2 programs integrate sound undergraduate education with challenging study at the graduate level. Program review and assessment are regularized across the University. Faculty play a major role in the development of courses and programs through the established curriculum review and approval process (see Standard 5).

Although faculty have the responsibility to develop and approve courses and programs, there is less active faculty input into which programs should be offered by PCE. In addition, the effectiveness of some PCE programs has not been adequately assessed. For example, the performance of students in concentrated courses (i.e., intersession, summer) in comparison with students in traditional semester-length courses has not been established.

General Education

The current Gen Ed program has defined specific learning outcomes, and established assessment methods. Assessment of First-Year writing suggests ENL 101 and 102 serve as an effective foundation for the development of students' writing skills, but that further instruction, such as is provided in the Tier II writing requirement, is necessary for mastery. Analysis of the MAPP results suggests that UMass Dartmouth students perform better than their peers in critical thinking, writing and math. However, the sample of students who took the MAPP had somewhat higher GPAs than the mean GPA for all seniors, so it is difficult to draw firm conclusions from the MAPP data. Though similar sampling issues confound precise conclusions from the 2005 and 2008 NSSE data, it does appear that our students perform on par with their peers in a number of Gen Ed areas, including ethics and social responsibility, diversity, information and computer literacy, math, written and oral communication.

Despite the generally positive results from the assessment data, there has been a recognition that a comprehensive review of the program is needed. In October 2009, the Faculty Senate, on recommendation from the Gen Ed Committee, created a Gen Ed Task Force. Several key issues are under discussion in the Task Force. First, there is no existing mechanism for reviewing and maintaining approval of courses that were previously accepted for Gen Ed requirements. There are concerns that, in some courses, content may have changed significantly since the original

approval, to the extent that the courses no longer align with the relevant Gen Ed outcomes. Second, there are some outcome areas that are commonly part of general education curricula, such as social science, critical thinking and integrated learning that are not part of the existing program. The adoption of the new ISLO statement, which weaves these areas into its fabric, heightens the importance of addressing these omissions. Third, as previously noted, outcomes need to be developed for the Oral Communication and Information Literacy areas. Regarding the latter, there is also a sense that the focus should shift away from computer instruction and toward the use and evaluation of online information. Fourth, there is a perceived need to create assessment processes that are more coherently integrated into the Gen Ed curriculum. Finally, there is a broader recognition that many advances have been made in the national conversation about general education since the program here was created a decade ago. The program in its totality needs to be reconsidered in light of these new ideas.

Assessment of Student Learning

As the Series E Inventory of Educational Effectiveness Indicators shows, some programs are further along than others in their assessment efforts, and some have not yet completed the full cycle of learning outcomes assessment. All departments have stated learning outcomes and a plan to assess the outcomes, approved by the relevant dean. Three colleges – Nursing, Business, and Engineering – have substantial learning outcomes assessment programs underway that have undergone full cycles. Their success can be attributed to their long-standing experience with external accreditations. In the College of Visual and Performing Arts, all programs except Music are accredited, and the arts programs have a long-standing practice of assessment through critiques and performance reviews. In the College of Arts and Sciences, each academic major has developed and published learning outcomes. The majors in English (three options), French, Spanish, History, Portuguese, Mathematics, Medical Laboratory Science (three options), Economics, Political Science, Psychology, and Crime and Justice Studies have identified the individuals responsible for assessment, have obtained findings, and have applied findings to make identified program improvements. While in some cases the outcomes and their assessment could achieve more focus and depth, these departments have all developed a culture in which assessment is the basis for curricular, program, and learning outcomes improvement. While assessment remains largely at the course level in Biology and Sociology/Anthropology, progress has been made in terms of developing learning outcomes and assessment planning.

An academic minor based on a subset of a major is assessed in the same manner and at the same time as the major. Regular assessment programs for interdisciplinary academic minors, such as Labor Studies, that are not cognate with any one major but offered using resources across a number of departments, have not yet been developed. Two exceptions are the minors in Gerontology and Leadership/Civic Engagement. Gerontology just completed a review in conjunction with the Nursing program; as a new minor, Leadership/Civic Engagement was required to include learning outcomes and an assessment plan under the recently updated review process for new program proposals.

The support that the institution offers for development of assessment practices in the academic programs has increased. To assist the departments as they work to develop assessment plans, each college has identified an individual to provide support. Efforts to assist with assessment by the OIRA during the 2009 academic year were focused mainly on General Education rather than program-specific assessment.

Experiential learning (internships, study away, study abroad) is not assessed. In addition, although AP, CLEP, and transfer credits are assessed according to published program learning outcomes, there are no published criteria to assess student portfolios for award of credit for prior experiential learning, an option offered through Professional and Continuing Education (PCE).

A major effort during the preceding academic year was to produce updated editions of the University's Undergraduate/General Catalog and Graduate Catalog. The resultant online publications have done much to clarify policy, program requirements, and curricular objectives.

Online Learning

UMass Dartmouth is focused on developing online degree and certificate programs to meet the needs of those who cannot easily travel to the campus, as well as extending access in areas of specialty. In AY 2008-09, a graduate certificate in Environmental Policy was developed, as well as an undergraduate degree completion program in Women's Studies. These programs went live in Fall 2009. Currently, programs in development include the Master's in Public Policy, graduate certificates in Project Management and International Business, and undergraduate degree completion programs in Liberal Arts and Nursing. Program development is guided by three collaborative entities. The Senior Advisory Committee for Online Education reports directly to the Chancellor and ensures that adequate resources are allocated to support strategic goals. The Academic Director of Online Education reports to the Provost and focuses on quality in academic issues; the Director of Online Operations reports to the Associate Vice Chancellor for PCE. Both of these leaders are expected to work together closely to coordinate the different aspects of online offerings. The Faculty Senate Committee on Online Teaching and Learning, composed of faculty from each of the seven colleges and schools, provides for appropriate faculty input. The Faculty Senate has recently approved a strategic plan for online teaching and learning.

Graduate Degree Programs

A number of the changes in graduate education at UMass Dartmouth have been made with guidance from a report on graduate education that was prepared by the Yardley Research Group in 2006. The Yardley Report presented a systematic comparison of each graduate program with peer institutions and norms for schools of the type UMass Dartmouth aspires to become. The Yardley Report continues to be a useful guide for program and policy development.

Within the PhD programs, faculty are required to hold a PhD or equivalent degree in order to act as dissertation advisors; but this requirement alone is not sufficient to assure quality mentoring and advising. Within the Biomedical Engineering/Biotechnology PhD program, faculty must qualify as dissertation advisors based on recent peer-reviewed journal publications; and dissertation committees must be comprised of a majority of faculty who publish actively in the biomedical engineering or biotechnology area. However, in other PhD programs, criteria for serving as doctoral level or master's level graduate faculty/advisors have not been clearly specified. A policy in this area needs to be developed to ensure the highest level of graduate student and program success.

Graduate program admission is generally selective, with an acceptance rate of approximately 70% overall. Seventy-five percent of UMass Dartmouth graduate programs require the

submission of standardized test scores (GRE, MTEL, or GMAT) for admission. More than 90% of admitted students who submit GRE scores have combined verbal and quantitative scores of 1000 or better. Generally, it is expected though not required that students have a GPA of 3.0 on a 4.0 scale to be admitted to the graduate program. Several programs specify that a 3.0 GPA is required (Biomedical Engineering/Biotechnology, Marine Science, Math Education, Nursing, some programs in Psychology, all programs in Engineering, and MFA programs); a few programs require a 2.7 GPA or higher (MAT, MAE, MA in Clinical Psychology). International students are recommended or required to score 550 or higher on the TOEFL; a score of 550 is mandatory to receive a teaching assistantship. On some occasions, students who do not meet these standards have been admitted, and this is an area of concern. Particularly at the PhD level, admission standards must be rigorous and assure that students are able to participate at a high level and successfully meet the demands and requirements of the program. Currently, admissions decisions are made at the department level, but college- or university-wide guidelines and standards for admission should be developed.

There has been a perception among some faculty in graduate programs that the pool of applicants for graduate programs is not as strong as it should be, especially in light of the recent growth of funded research activity, the increase in resources being devoted to graduate research and education, and the increased quality of our graduate programs in general. Because admission is department based, there appears to be some inconsistency in adhering to admission standards across and within programs from year to year. The admission of weaker students to a program discourages stronger applicants, which can lead to a spiral of descending credentials in the applicant pool. A long-term commitment to raising admission standards across the University can effectively address this concern.

To improve the applicant pool, a better coordinated, focused marketing strategy for graduate programs is needed. In the past, efforts to promote programs lacked a specific budget and no one was identified to oversee marketing or maintaining web pages. Adding the Associate Provost for Graduate Studies to the Provost's senior team and the hiring of a Director of Marketing and Recruitment in the Graduate Office provide the leadership necessary to improve and implement new marketing strategies and to identify essential resources. Another factor that may limit the pool of applicants is the comparatively low level of graduate stipends that are offered. UMass Dartmouth's average full-time teaching assistant (TA) salary is approximately $10,200 per year, which is well below the national median TA stipend of $14,500 per year. New policies have been developed over the past few years to better direct graduate assistantship resources to programs that need them to recruit students, to foster research productivity, and especially to grow doctoral programs. As a result, TA compensation is improving and now includes full tuition and substantial fee waivers. However, overall compensation of TAs and research assistants remains low and resources must be directed to this issue to improve competitiveness.

Nevertheless, the emphasis on expanded graduate education has had positive results. As noted above, despite financial constraints, resources have been re-directed to support graduate program growth. One effort to expand enrollments in professional master's programs, whose students do not generally receive assistantships, has been to modify the MAT program to enable graduate students to earn the degree and initial licensure at the same time. Other efforts include the addition of a part-time advisor/recruiter focused on business and continuing education programs and a full-time admissions/recruitment specialist in the Graduate Office; these changes resulted

in a substantial expansion of graduate enrollments for Fall 2009. Graduate enrollment during the past decade is illustrated in table 4.2.

Table 4.2: Graduate Enrollment from Fall 2000 to Fall 2009

Program	Fall 2000	Fall 2001	Fall 2002	Fall 2003	Fall 2004	Fall 2005	Fall 2006	Fall 2007	Fall 2008	Fall 2009
PhD	26	23	27	39	52	43	48	52	60	98
Masters	520	590	631	637	655	674	781	768	735	815
All degree	546	613	658	675	707	717	829	820	795	913
Non-degree	153	209	149	250	302	319	301	333	378	436
TOTAL	699	822	807	925	1009	1036	1130	1153	1173	1349

In order to support the desired growth of research programs, particularly in the sciences, the quantity of research space will need to be expanded and the quality of some spaces improved. Many of the on-campus laboratories have not been renovated since they were built in the middle or late 1960s, limiting their functionality and efficiency and requiring extensive measures to maintain adequate safety. The institutional aim of growing more and stronger PhD programs will require a reprioritization of lab renovation in the capital planning process. Building and renovating laboratories in support of doctoral programs has begun; a recent renovation of chemistry labs is an example. Similarly, library resources need to be enhanced to support larger PhD programs, and renovations of the library are already underway (see Standard Eight). The Library is part of the Boston Library Consortium, making many books accessible to UMass faculty through multi-campus loan, and its Interlibrary Loan services provide journal articles in print format. Online access to the many journals that PhD programs require is somewhat limited and will need to be expanded. The Library has plans to address the need for additional resources for graduate study (see Standard Seven).

As noted in the description, the Graduate Council serves in an advisory capacity to the Associate Provost of Graduate Studies. The Council consists of the graduate program directors from each department with a graduate program. The Council was developed when there were fewer graduate programs on campus; now, with more than 20 departments offering graduate programs, this committee has become quite large, making it difficult for it to efficiently take on issues and challenges that are specific to certain programs or areas. Furthermore, none of the governance committees within the Faculty Senate are focused solely on graduate education; the Admissions and Financial Aid Committees, for example, have responsibilities for undergraduate as well as graduate levels. An improved, more focused structure for graduate program oversight and guidance is needed.

Assessment of learning outcomes in graduate programs is integral to the structure and requirements of the programs. All graduate programs require a substantive capstone activity, in the form of a project, thesis, or dissertation; a portfolio or performance; or comprehensive

examinations. A review of Series E responses reveals that all programs are evaluated, some more formally than others, and results are used for program improvement. Setting a regular schedule for such reviews and establishing standards would improve both depth and clarity of assessment of learning outcomes. More formal reviews are conducted by programs in the College of Nursing and the Charlton College of Business, which are accredited by external agencies. New graduate programs are required to state learning outcomes and include a plan for their assessment.

PROJECTIONS

UMass Dartmouth has made a strong commitment to personalized education and expansion of graduate programs, while maintaining quality and broadening access. The projections detailed in this section reflect the University's focus on assessment and data-driven improvements in the academic programs.

General Education: Gen Ed will be improved in several respects. The Director of General Education will lead these efforts in collaboration with the Associate Provost of Undergraduate Studies; the Gen Ed Task Force will carry out much of the work.

Schedule and Activities:

- In AY 2009-10, the Task Force will review the existing program, evaluate alternative models and programs, and engage faculty in discussion of potential changes. The Task Force will also create a process to collect input from the faculty and University community about a revised Gen Ed program and incorporate input gathered into a final report to the Faculty Senate. This report will recommend a revised set of learning outcomes, fundamental curricular structures and principles, and assessment processes.
- In AY 2010-11, the Gen Ed Task Force will articulate the details of the revised curricular structure and assessment processes. Through extensive public discussion and multiple feedback activities, the Task Force will finalize plans for implementation of the new program.
- In AY 2011-12, a Gen Ed Implementation Committee will oversee the first phase of implementation of the new program.

Student Assessment: Assessment of learning outcomes in the academic programs, particularly the use of data to drive program revision, will be strengthened. The Assistant Chancellor for Institutional Research and Assessment and the Associate Provost for Undergraduate Studies , together with each college's designated assessment liaison (assistant or associate dean or faculty member), will lead this effort, detailed in Standard Two.

Schedule and Activities:

- In AY 2010-11, the Provost will update the Assessment Policy issued in 2004; the working group will identify supports needed for annual data and activity reporting; and OIRA will develop templates for data reports and activity inventories.
- In AY 2011-12, academic departments will submit to their respective deans an annual report that highlights assessment results in a modified E-Series format, along with updated assessment plans. The Provost, Associate Provost for Undergraduate Studies, and Assistant Chancellor for Institutional Research will review these reports.

Learning outcomes and an assessment process will be established for experiential learning (internships, study away, study abroad, and service learning). The Associate Provost for Undergraduate Studies will lead this initiative in collaboration with the directors/coordinators of the experiential learning programs and the Associate Vice Chancellor of PCE.

Schedule and Activities:

- In AY 2010-11, the director/coordinator of each experiential learning program will work with affiliated faculty and site supervisors to identify student learning outcomes and propose an assessment plan for their program.
- In AY 2011-12, the director/coordinator of each experiential learning program will conduct an initial assessment and discuss the results with the Associate Provost for Undergraduate Studies.
- In AY 2012-13, a similar process will be used to develop criteria for the award of credit for experiential learning based on portfolio evaluation.
- In AY 2013-14, a pilot review of experiential learning portfolios will be conducted.

Assessment of PCE programs will be strengthened. The Associate Vice Chancellor of PCE and the Associate Provost for Undergraduate Studies will lead this initiative in collaboration with program coordinators and faculty.

Schedule and Activities:

- In AY 2010-11, PCE's Pathways program will develop a plan to assess student retention and success upon matriculation into a degree program.
- In AY 2011-12, Pathways program will begin assessment.

Online Learning: Online programming will be expanded to better meet the needs of current and continuing students. The Academic Director of Online Education, the Associate Vice Chancellor of PCE, the Executive Director of Online Operations, and the Faculty Senate will lead this effort.

Schedule and Activities:

- In AY 2009-10, develop and assess student services to address online admissions processes and to provide fully online students with access to all campus services.
- In AY 2010-11, develop fully online, interactive student orientation experiences.
- In AY 2010-11, develop and implement processes for ensuring pedagogical and instructional design effectiveness for web-enhanced, blended, and online courses as well as assessment tools to assure student learning.
- In AY 2010-13, identify, develop, and implement undergraduate courses, certificates and/or degree completion programs.

Graduate Programs: Several initiatives are planned to achieve UMass Dartmouth's strategic goals for developing doctoral programs in areas of faculty and institutional strength, both to meet regional need and to achieve Carnegie Doctoral/Research Institution designation. While programmatic initiatives come from the department level, leadership, policy and operational support for graduate programs will be coordinated by the Associate Provost for Graduate Studies with the support of the Graduate Council.

Schedule and Activities:

- In Spring 2010, the Graduate Council, with oversight and support of the Associate Provost for Graduate Studies, will establish subcommittees on doctoral programs, research-based master's programs, and professional master's programs to improve graduate program leadership and oversight and to present a report of their findings to the Graduate Council by May 2010.
- In AY 2009-10, the School of Education, Public Policy and Civic Engagement will continue the process of developing an EdD in educational leadership and a complementary PhD in Educational Policy. It is anticipated that student enrollment will begin in Summer 2011.
- In AY 2010-11, the Associate Provost of Graduate Studies will develop and improve guidelines, policies and procedures for the administration of graduate programs and the allocation of graduate resources in support of graduate student admissions, progression and certification.
- In AY 2010-11, the College of Nursing will complete the development of a new Doctor of Nursing Practice program to comply with the new licensing standards that take effect in 2015.
- In AY 2010-11, the College of Arts and Sciences, Charlton College of Business, and the College of Engineering will continue collaborative efforts to develop a new PhD in Engineering and Applied Science with options in Applied Mechanics, Computational Science, Computer Science, Industrial Engineering and Materials Science. The proposal will be submitted for approval by the Office of Graduate Studies by academic year 2011.
- During academic years 2010 and 2011, new professional science master's programs will be developed and proposed in the School for Marine Science and Technology, the College of Engineering, and in the Biology and Medical Laboratory Science Departments, to increase access to and enrollment in graduate programs for working students. Department chairs, graduate program directors, and faculty will collaborate with the Associate Provost for Graduate Studies and the Graduate Council to design these programs.
- Beginning in AY 2009-10 and continuing to 2012-13, doctoral and distinguished doctoral fellowships awarded by the Associate Provost for Graduate Studies will increase to a level of $1.2 million per year.
- As described in Standards 7 and 8, additional library space for graduate research and an improved library infrastructure will be completed by academic year 2012.

Institutional Effectiveness

UMass Dartmouth has made significant progress in evaluating the effectiveness of its academic programs during the past decade. The results of assessments such as the AQAD reviews, external accreditation reports, annual updates of departmental assessment activities, and assessment of General Education have been used to inform curriculum and program planning. The Integrated Student Learning Outcomes (ISLO) statement embodies both the focus on and the commitment to assessment of student learning outcomes. Moving forward, this statement of the attributes of the educated person will facilitate General Education renewal and integration of assessment throughout the academic program.