

To: Charles Caramello, Dean of the Graduate School

From: Working Group on Graduate Certificates

Alex Chen, Architecture

Philip deShong, Chemistry & Biochemistry

Sally Simpson, Criminology

Rob Sprinkle, chair, Public Policy

Ping Wang, iSchool

Ashlee Wilkins, doctoral candidate, Astronomy

Date: 8 March 2016

Re: FINAL REPORT

The University of Maryland, like other research universities, including all 15 CIC institutions, enrolls a number of post-baccalaureate students in short-term narrowly focused programs whose successful completion it formally certifies. It has been doing so since January 1984, when four graduate-certificate programs debuted; in August 2015 a review of records showed 115 graduate-certificate programs as being approved to operate. Of these, 31 had been approved through the Programs, Curricula, and Courses Committee (PCC) using the Professional Studies template; 14 had been approved as Certificates of Advanced Study (AGS) for postmaster's students; and 69 had been approved for post-baccalaureate students generally.

As orderly as it may seem, this list overlays nagging ambiguities. Some programs evidently functioning at the post-master's level were approved generically only at the post-baccalaureate level. Some program codes refer to identically named offerings. Some programs appear to be dormant, as they have shown no applications, no enrollment, and no awards since Fall 2010. Some programs are passing applications through the Graduate School whereas others are enrolling students directly. Unsurprisingly, *The Graduate School Catalog* (http://apps.gradschool.umd.edu/catalog/certificate_program_policies.htm) embeds 26 links to pages maintained idiosyncratically (and in some cases non-functionally) by offering units, but the Graduate School itself has posted no master list of the programs themselves.

THE GRADUATE-CERTIFICATE RATIONALE

On our campus graduate-certificate programs have been offered for a range of reasons. Many have responded to demand, whether demonstrated or presumed; prototypical have been those prompted by a private or public employer perceiving a training need best met by a university's faculty and facilities and willing to fund graduate education if limited in scope, short in duration, and convenient in location and hour. Complementary to these market-demanded

programs have been others designed (nominally in the extension tradition of land-grant universities) to function as economic-development aids for the State of Maryland. Some programs — often called "entrepreneurial," a term applying also to graduate initiatives not examined in this report — have been designed to induce demand and have actively been marketed to potential funders; a broad surge in graduate-level entrepreneurial activity coincided with the "Great Recession," 32 certificate-program debuts being recorded from May 2008 through May 2010. Some graduate-certificate programs have been created in parallel to professional master's programs to accommodate highly qualified students from industry seeking short sequences of courses and sure to return to their careers bearing the University's imprimatur and likely in future to look favorably upon its graduates; this use of graduate-certificate programs to sharpen the University's profile is overtly entrepreneurial in its own extra-financial way. Some graduate-certificate programs have evolved to allow potential or rejected degree-program applicants to assess to their own satisfaction, or to a dubious professor's satisfaction, an ability to learn and perform at the graduate level.

Three more reasons contrast with these. Some graduate certificates are awarded within, or by, doctoral or master's programs so as to acknowledge extra or concentrated study, whether by regularly enrolled students or by "advanced special" students. Some graduate certificates are awarded to specially admitted cohorts to cater to their sponsors, often foreign governments seeking a broadening experience for favored subordinates; although they tend to be offered only *ad hoc*, these programs may persist absent any plan to operate them again. Some "graduate certificates" are awarded simply to document completion of activities in some way involving academic units; marketability to targeted constituencies is, reputedly, facilitated by the promise of such certification.

GRADUATE CERTIFICATES IN STATE LAW

The Code of Maryland (COMAR) considers all certificates, including graduate certificates, to be "degrees" — a fact surprising or dismaying to everyone consulted. This report will henceforth use "degree" only in its customary campus sense, while noting for subsequent consideration the issues inherent in COMAR's sense.

COMAR authorizes certificates by type and process:

- ▼ Graduate certificates by type authorized in COMAR.
 - ▼ Semester credit hours > 12
 - A lower-division certificate (freshman or sophomore levels or both).
 - An upper-division certificate (junior or senior levels or both).
 - A post-baccalaureate certificate (graduate or upper-divisional level, the majority of which are at the master's or specialized postgraduate level).
 - A post-master's certificate beyond the master's degree.
 - \sim 24 ≥ semester credit hours ≥ 12
 - A directed technology certificate developed specifically for employer training needs

at a closed site.

- - A certificate of advanced study beyond the master's degree.
- ▼ Some number of courses required by a national professional association.
 - A professional certificate.
- ▼ Graduate certificates by process authorized in COMAR.
 - Evidence that a graduate certificate has been developed in consultation with a specific employer or employers to meet specific training needs.
 - Evidence of review by an institution's appropriate approval bodies.
 - Evidence that a content specialist will be assigned to ensure high standards and maintain written documentation about the curriculum.
 - Evidence that financial resources are adequate to support the curriculum.
 - A one-page document shall be sufficient to propose a new certificate in an existing degree program.

CURRENT SITUATION

While COMAR's "one-page proposal" rule has not become familiar on our campus, neither has micromanagement. Units have found graduate certificates easy to propose, create, adapt, administer, and abandon and have often, but far from always, found them worthwhile. Start-up has been kept "lean," and the reporting burden, by design, has been kept light. That said, the number of students flowing through these programs has been less than might be guessed. In Fall 2014, as assessed last August from Graduate School data, only 29 graduate-certificate programs enrolled any students at all; total enrollment across these 29 programs was 191; only 6 programs enrolled 10 or more students, and 122 of 191 students (64%) were concentrated in these 6 programs. In the 12 months ending January 2015, 140 graduate certificates were awarded.

Some applicants were turned away, but how many and why — weak qualifications or inadequate program capacity or some other reason — we do not know; some may have dropped out. Despite best efforts, uncertainty persists, for several reasons. Different certificate programs may have practically identical names. Units can cancel programs in the midst of an admissions cycle and neglect to inform the Graduate School of the cancellation. Since those in graduate-certificate programs cannot receive financial aid but those in professional master's degree programs can, students applying to the first may switch to the second without the Graduate School being aware. Nationality restrictions affect many programs; switching to an unrestricted program may be the consequence.

Data can be quite inconsistent table-to-table. For example, to all the graduate-certificate programs for which the Graduate School maintains records 1,689 students applied over the five years from Fall 2010 through Fall 2014; of these, 1,502 were rejected and 187 accepted — an 11% acceptance rate. Yet for Fall 2014 alone the Graduate School separately recorded 244 applicants of whom 133 were accepted — a 55% acceptance rate.

Complicating this picture for the Working Group and for potential students, is the fact that 14 (or, correcting for what may be a duplication, 13) graduate-certificate programs are offered through the Office of Extended Studies (OES). The Graduate School list and the OES list overlap, but the two lists are not congruent. Policies and practices are also quite distinct. Complicating this picture for potential students, for entrepreneurial program directors, and for the University System of Maryland is a list of 12 graduate-certificate programs marketed for all-online delivery by the University of Maryland University College (UMUC). The Working Group examined these two parallel enterprises but analyzed neither.

CHARGE TO THE WORKING GROUP as amended 15 December 2015

The Working Group should research and review issues regarding Graduate Certificates at UMD and peer institutions. These issues range from broad matters of academic standards and market responsiveness to specific matters such as vetting students for admission, co-mingling students in classes, and double counting courses for degrees. The Working Group should focus its attention on academic and administrative issues, rather than on financial matters.

The Working Group should conduct its study with two particular contexts in mind.

- First, many Graduate School policies were established prior to the rapid growth in Graduate Certificates, so the Working Group should review School policies and Certificate practices with an eye toward improved alignment.
- Second, the mission and strategic objectives and goals for graduate education at UMD are evolving, and the Working Group should consider the place and role of Graduate Certificates in the context of that evolution (see "The Centennial Vision Graduate Education at UMD: Research and Professional Practice for a Global Economy" [as updated 1 April 2015]).

ACTIVITY

A quorum of the Working Group met four times; at one of these meetings the Program Director of the Office of Extended Studies spoke and took questions. The chair met with the Executive Director of the Office of Advanced Engineering Education. Two members of the Working Group met together at the Graduate School three times, once with the Dean. The chair met once with the Associate Provost for Academic Planning and Programs. The Graduate School was most forthcoming with records, documents, and data. For correction and amendment prior to submission a draft of this report was circulated within the Working Group and to the Assistant Dean and Chief of Staff of the Graduate School.

FINDINGS AND THEIR IMPLICATIONS

Academic standards.

Graduate-certificate programs may vary widely in substantive ways.

Those programs vetting certificate applicants as they do all other graduate applicants and then teaching all matriculants together would have good reason to anticipate comparably strong classroom performances except insofar as credit-hours already earned might predict performance in any next course taken. If taking time out from successful professional careers, certificate matriculants might even out-perform regular degree students.

Those programs vetting certificate applicants differently and teaching differently tracked matriculants in separate classrooms would have good reason to doubt comparability, all the more so if faculty differed, too.

We expect that all these details could be discovered within the range of programs represented in Graduate School data, but we had no practicable way to test this expectation. We did, though, find signs reassuring as to quality. One was that certificate-seeking students often go on to earn another certificate or to earn a master's or doctoral degree; 40 students earning a graduate certificate at the end of Spring semester 2013 did so by the end of Summer 2015.

A presumption underlaying the academic-standards issue should not go unquestioned. Should graduate-certificate programs emulate regular graduate-school standards? Or should they not do so? The constituency served might be expanded markedly either way, but not both ways at once without a clear distinction between graduate non-degree programs of two types: "continuing-education graduate certificate programs" and "academic graduate certificate programs." Logically, the former would exclusively feature courses that were not in the graduate catalog, while the latter would exclusively feature courses that were in the graduate catalog; the former would document completion, while the latter would award hours of graduate credit. Such a distinction would presuppose a change in, or at least a robust reinterpretation of, COMAR.

Market responsiveness.

In one respect, a low or even middling acceptance rate shows demand exceeding the University's ability, or wish, to respond. In another respect, the paucity of applications to, the small enrollments in, or the long dormancy of, some programs suggests either a failure of market research, an operational mistake in marketing, or a reassessment of goals. The surge in program debuts during a period of national recession and state budgetary rescissions suggests entrepreneurial incentives dominating mission incentives. Were these "sub-prime" programs, or did they thrive? (Hard to say, actually; enrollments were small and sporadic across these certificates, many of which were earned in a unit co-mingling certificate-seeking and degree-seeking students.)

The Graduate School should encourage more insightful mission-strategic thinking and better assessment of potential demand without too flagrantly disrespecting the "one-page proposal" rule. Programs too readily established clutter the Catalog. A "sunset" rule for "shadow" programs could help, as could unit-level willingness to reconcile appearance with actuality.

Co-mingling and double-counting.

Among the most successful programs in the Graduate School's list are ones dependent on the co-mingling of certificate- and degree-seeking students in the same classroom. In these cases the larger and more critical "sustaining partner" is some version of a Master of Professional Studies (MPS) degree. Certificate enrollment, quite attractive to students already on professional career paths, expands and contracts as student interest and classroom space allow. In this particular co-mingling scheme, certificate- and degree-seeking students occupy the same classroom at the

same time to take the same course, just fewer times or more times, respectively, and the classrooms themselves might be on-campus or remotely off-campus or sometimes online — but never in the MOOC sense of "online." Moreover, if certificate-seeking students apply successfully to become degree-seeking students, course credits earned during certificate enrollment become fully applicable during degree enrollment and decrease the remainder of credits to be earned. Whatever benefit accrues to the University through such a graduate-certificate program would be foregone were a rule against co-mingling enforced.

In the OES system since 2009, certificate- and degree-seeking students have been vetted differently, have been enrolled in differently designated courses, have been described as being taught differently, and have not been co-mingled. While it may be expecting substantial enrollment and excess revenue, a department is for five years contractually obliged not to cancel a course even if only one certificate student needs to take it. So, while gaining the flexibility to admit numbers of less competitive paying students, departments accept the risk of having to pay instructors more than might be gained from tuition fees. Nonetheless, and a bit ironically in light of the co-mingling prohibition, a contracting department may at its own discretion apply credits from a certificate program to a degree program; departments have indeed done so.

We should note here that currently enrolled graduate students seem to be experiencing the prohibition against co-mingling not as variably enforced but as absolute. This prohibition is especially vexing for doctoral students anticipating multiple-career-path futures. These students might have good reason to polish neglected facets of their education in courses outside their departments or in free-standing academic graduate certificate programs. Evidently, they cannot do so.

Taking a campus-wide perspective, students meeting dissimilar standards for admission — or similarly acceptable students having dissimilar luck when competing for the very last spot in a degree program or simply preferring a shorter course of study — may take the same course in the same room or may take the same course differently labelled and taught in different rooms. If both students perform well, should the credit they earn be differently valued? The Working Group heard two firm answers, no and yes, and one pragmatic answer, not necessarily.

Taking only the Graduate School perspective, we found a reluctance to endorse co-mingling and double-counting but a disinclination to prohibit them where they were practiced, since they were practiced there successfully and were essential, not incidental, to the success being demonstrated. We heard two general defenses of the unenforced prohibition of co-mingling and double-counting. One referenced gaps in quality between certificate-seeking and degree-seeking students and a department's obligation to guarantee to degree-seeking students a classroom of peers. A second defense referenced loss of tuition income if a degree-seeking student could count any previously completed required course against the total number of credits needed to advance to master's graduation or doctoral candidacy.

The values being defended here were distinct. The first defense was on its face quite formidable. The second defense had an obvious weakness: many students enter degree programs with extraordinary preparation and are accommodated, one way or another. Yet an instructive

commonality became apparent. Both defenses were Ptolemaic, in that they placed at the center of concern an arbitrarily elevated good, the consequence of this placement being epicyclical adjustment elsewhere. The most obviously adjusted good was the value of the course; it was being made contextual. A Copernican fix would put the value of the course in the center where it alone would be constant; anyone passing a University of Maryland graduate course would be able to apply the credit so earned wherever and whenever it could be used. While it would stabilize the value of the University's signature pedagogical product, the course itself, this "credit-in-the-bank" guarantee would not assure that a passed course *could* be used; admission to a graduate program would still be required and might be denied on grounds other than classroom performance. This fix would surely ruffle the post-baccalaureate system, but it might do so beneficially. Progress might be made simultaneously but in opposite directions. In one direction, the crafting of continuing-education certificate programs might more clearly recall the University's "extension" tradition with grading standards appropriate to the achievement being certified. In another direction, interest in academic graduate certificate programs might surge and admission standards rise as the value of proving one's abilities in advanced courses would become more apparent.

SUMMARY ASSESSMENT

Alignment of Graduate School policies with graduate-certificate program practices

No alignment of policies with practices can he made or maintained without full and accessible information. Most suitable would be compulsory yearly online reporting through a purpose-built Graduate School website page.

Reconciliation with "The Centennial Vision"

If the University's professional mission is to expand adaptively to multiple-career-path and career-path-adjustment realities then graduate-certificate programs will have to be seen as standard — never substandard — offerings, wherever and however and by whomever delivered. Compared to professional master's and doctoral programs, graduate-certificate programs are easy to create, and if adequately marketed they should be self-supporting. That said, career-path adjustment, if correctly seen as a trend, may be facilitated better not by pre-determined sequences of courses but by individual courses chosen in consultation with (pardon the term) career-path advisors. As has long been the case, Advanced Special Students may take single courses, and in some departments successful professionals are encouraged to do so when contemplating, and when being evaluated for, formal entry into graduate programs. This advanced-special mechanism, now allowing as many as 12 credit hours to be applied to a graduate certificate, would need considerable reform to work well for a potentially large career-path-adjustment market. And as career paths may need to be curved and re-curved progressively rather than shifted sharply once, a "credit-in-the-bank" guarantee, such as discussed above, might help the University respond to ongoing adjustment needs, meeting them as they arise.

PRINCIPLES FOR REFORM

- 1. Graduate certificate programs need not be standard in rationale and cannot be standard in content but should be standard in quality.
- 2. The Graduate School need not have perfect information but should expect to have basic information which should be updated reliably.
- 3. Continuing-education non-degree graduate programs should feature no course in the graduate catalog and should document a completion of study but not seem to certify an award of graduate credit.
- 4. Academic graduate non-degree programs should feature *no* course *not* in the graduate catalog and should certify an award of graduate credit denominated in hours fully acceptable in a related degree program to which a student might in future be admitted.
- 5. Entrepreneurial incentives should not dominate mission incentives.
- 6. The Graduate Catalog and all offering units should reconcile appearance with actuality by pruning dormant programs.
- 7. If certificate-seeking students apply successfully to become degree-seeking students, graduate course credits earned during certificate enrollment should be fully applicable during degree enrollment and should either decrease or respecify the remainder of credits to be earned.
- 8. Academic graduate non-degree program admission standards should be kept high enough for the co-mingling of certificate-seeking and degree-seeking students to meet a "classroom-of-peers" target as confirmed in grading.
- 9. The value of a University of Maryland graduate course should be constant, not contextual, this "credit-in-the-bank" guarantee meaning that anyone passing such a course should be able to apply the credit so earned wherever and whenever it could be used.
- 10. Prohibitions against co-mingling and double-counting have been arbitrary, inefficient, arguably disingenuous, and openly unenforced; these prohibitions should be retired.
- 11. Current graduate students wishing to diversify career-path options should not be barred from entering academic graduate non-degree programs while enrolled in regular graduate degree programs.
- 12. Multiple-career-path and career-path-adjustment realities indicate that graduate-certificate programs not only should meet high standards but also should meet many needs as packages to be opened, not just boxes to be delivered.
- 13. "The course" should be freed from "the program" so that non-degree-seeking graduate students, admitted once, might be accommodated flexibly, as needs arise and circumstances allow.