Committee on Graduate Studies Report to the Faculty July 2019 - June 2020

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Introduction

The structure of the Annual Report by the Committee on Graduate Studies (COGS) to the Arts & Sciences Faculty is as follows:

- brief introduction, including a discussion of the importance of Arts & Sciences graduate programs to the university
- new and recurring themes and issues facing graduate programs in Arts & Sciences
- · highlights of items discussed and resolved by COGS
- highlights of administrative changes instituted by the OGSR
- presentation of Graduate Arts & Sciences Catalog changes that occurred over the past year
- · report on the activities of the Graduate Center
- report by the A&S Graduate Ombudsperson
- appendices

The Importance of Arts & Sciences Graduate Programs to the University

Graduate programs in Arts & Sciences (A&S) are integral to the mission of William & Mary (W&M). By providing the expertise and opportunities of a major research university, combined with the faculty mentoring and dedication to teaching found at a small liberal arts and sciences college, W&M awards A&S graduate degrees that are essential for leadership positions across a broad spectrum of careers. In Arts & Science we have eleven selective graduate programs that are often recognized as being among the most academically rigorous in the nation. For example, in the 2018 *U.S. News & World Report*'s rankings for Best Graduate Schools, the History doctoral program tied at 27th in the U.S. compared to 36th in the 2014 ranking (doctoral programs in History are evaluated every four years), and the colonial history program held its spot as third in the nation. Our master's programs in Psychological Sciences, Chemistry, and Biology are among the strongest research-focused terminal master's programs in the country. We punch well above our weight when it comes to the respect held for our graduate programs.

We are a university because of our graduate programs. Hence our identity as a *liberal arts and sciences university* is just as much tied to graduate excellence as it is to our reputation as an undergraduate liberal arts and sciences institution. Excelling at the graduate level and fostering a strong sense of community among our graduate students and graduate faculty has been a key component of the W&M Strategic Plan. The strength of our graduate programs places us in a higher select peer group, which helps attract new faculty, students, and staff, as well as instructional, research, and infrastructure resources that otherwise would not be available to us.

The A&S departments and programs with graduate programs award approximately 35% of the undergraduate A&S degrees, are vital in retaining roughly one-half of the A&S tenure-equivalent faculty, and justify William & Mary's inclusion on The Carnegie Classification of Institutions of Higher Education's list of Research Universities with higher research activity (RU/H). In addition, in FY 2020, faculty members affiliated with any of the eleven A&S graduate programs generated almost 63% of the Facilities & Administrative (F&A) cost recovery in A&S. These funds are essential for maintaining the research infrastructure for all W&M faculty since A&S accounts for the lion's share of F&A recovery on the main campus.

Our ability to recruit and maintain a strong research-active faculty in several key disciplines depends on the strength of our graduate programs. The inability to recruit sufficient numbers of qualified doctoral students to work with research-active faculty members has caused some faculty members to leave W&M. The departure of these research-active faculty members represents a substantial pedagogical and financial loss to W&M. The research conducted by A&S graduate programs also enables a large proportion of the undergraduate research opportunities offered on campus. The graduate students help mentor undergraduate researchers and facilitate faculty-undergraduate research collaborations. As undergraduate research is a hallmark of W&M, recruiting and supporting research-active graduate students also strengthens our ability to deliver a distinctive undergraduate educational experience. In addition, A&S graduate students enrich the undergraduate program by serving as tutors, writing preceptors, lab and discussion section leaders, teaching assistants, instructors, and graders in courses with high enrollments and those central to the new COLL curriculum.

New and Recurring Themes and Issues

There is no question but that the COVID-19 pandemic has created a host of new issues for Graduate Arts & Sciences, starting with the shutdown of the entire campus at the close of business on Friday, March 13, 2020.

The shut-down had immediate impacts not only on day-to-day operations, but also on recruiting for the Fall 2020 incoming cohort (the Council of Graduate Schools (CGS) deadline for accepting an offer of admission with financial support is April 15, and CGS elected not to change the deadline in the wake of all the shutdowns), and on students who had filed to graduate in May 2020. The good news is that the immediate effects were dealt with swiftly and successfully: The Office of Graduate Studies and Research (OGSR) was able to pivot to fully remote operations with only minor hiccups that were rectified quickly and effectively once they were recognized. COGS members approved individual exceptions to admissions requirements for applicants who could not secure official transcripts or were struggling to take the GRE general subject exams. As will be discussed later, all but one of the graduate programs had a surprisingly robust recruitment season despite the major disruptions. COGS members also approved a Pass/Fail policy for A&S graduate courses for Spring 2020 that closely mirrored that set by the provost for undergraduate courses. Interestingly, only two students took advantage of this option: a graduate student from another W&M graduate school who was enrolled in an A&S graduate course and a W&M undergraduate who was taking an A&S graduate course for graduate degree credit; none of the A&S graduate students registered for Spring 2020 elected to pursue this option. Finally, every A&S graduate student who had filled out the OGSR's Intent to Graduate Form by the deadline of February 15, 2020 to confirm their intent to graduate in May 2020 met all their degree requirements in time to graduate in May 2020.

Unfortunately, the impacts on those who were not as far along in their graduate careers in A&S are likely to be

felt for years to come. In particular, the initial shutdown of the campus, the ongoing restrictions on travel unless it is funded by an external grant, and the social distancing and other safety protocols in force mean that research was – and remains – severely disrupted, thus hindering students' progress toward satisfying their degree requirements.

To place this concern in context, of the roughly 350 students pursuing graduate degrees in A&S, two-thirds were admitted to pursue a doctorate and thus must submit a dissertation that is based on original research that constitutes a significant contribution to scholarly knowledge. The majority of the terminal master's students in A&S (with the exception of roughly two dozen students pursuing professional degrees in either Computational Operations Research or Public Policy) must submit a thesis that presents work that is based on original research that constitutes a contribution to scholarly knowledge. Thus, the overwhelming majority of A&S graduate students must engage with the world in order to conduct original research. This engagement can take the form of fieldwork in historical archaeology, biology, or history. For young scholars in applied science, biology, chemistry. computer science, physics, and psychological sciences, it can mean conducting experiments in scientific labs on campus and off (e.g., Jefferson Lab, Fermi Lab, etc.). For those whose experiments involve working directly with human subjects in disciplines such as American studies, computer science, history, or psychological sciences. permission to engage in direct contact has been suspended with deleterious consequences for their research. And for those in American studies, historical archaeology, and history whose scholarship relies in critical ways on access to archival materials in libraries, historical societies, public history sites, etc., the closure of these sites - along with the suspension of travel not funded by external grants - means those research activities have been placed on hold.

The coming year will be particularly critical for these young scholars as we work on ways to help them safely reengage in their research activities, and we must do so in a way that does not preference some forms of scholarship over others. We will need to be more lenient with regard to formal time-to-degree deadlines, and the faculty in the individual graduate programs have had to be creative in identifying ways to fund these young scholars for terms longer than has been standard given the significant amount of critical research time they lost due to the disruptions caused by COVID-19.

The international health crisis also has only further highlighted a theme that has been recurring one for Graduate Arts & Sciences: an institutional commitment to cover the student health insurance premium for all A&S graduate students receiving financial support as Graduate Assistants so as to ensure that these students have adequate health insurance coverage that is not obtained at the expense of other fundamental needs they must manage with limited financial resources. In Fall 2019, Dean Kate Conley once again submitted a Planning Budget Request (PBR) entitled *Remediate health insurance cost increases for graduate students* with the following required answers to two key questions:

Unit goal the request will advance

Preserve the value of current financial packages for enrolled graduate students (retention); remain competitive among peer institutions in attracting future graduate students (recruitment).

What you hope to accomplish (expected outcomes)

Doctoral students typically require 5-8 years for degree completion. Remediating increased premium costs for W&M-mandated health insurance preserves the value of graduate students' financial packages, reduces disproportionate hardship for our most economically fragile students, and improves retention. Also, we remain competitive among peer institutions in recruiting highly qualified and diverse candidates, achieving the climate of excellence and inclusion we strive to attain across Arts & Sciences.

W&M neither covers nor supplements the mandatory student health insurance premium. Anecdotally, most of the universities against whom we compete do. It is common when top applicants decline an offer of admission from W&M to report that the institution where they will matriculate instead offered them a financial package that includes student health insurance coverage. Within the Commonwealth of Virginia, George Mason University, Old Dominion University, University of Virginia, and Virginia Tech all either

cover or supplement the cost of their university's student health insurance premium.

While the new W&M provost, Peggy Agouris, was supportive of this PBR, the financial strains to W&M caused by the pandemic meant that no PBRs were funded for FY21 as the entire university instead undertook FY21 mission-critical budget planning to significantly reduce operating costs in anticipation of major budget deficits.

For the first time in seven years, there is support from the President, Katherine Rowe, the Provost, Peggy Agouris, the Chief Operating Officer, Amy Sebring, both the new and the former dean of the Faculty of Arts & Sciences, Maria Donoghue Velleca and Kate Conley, as well as the Dean of Graduate Studies and Research, Virginia Torczon, and all members of the A&S Graduate Studies Advisory Board for identifying funding in support of this initiative. However, until the universities finances have stabilized, the institution is no longer running at a deficit, and adequate funds can be identified, this initiative remains on hold – probably at least through FY22.

At the May 13, 2020 meeting of the A&S Committee on Graduate Studies, ten graduate directors reported on the results of their recruiting efforts for Fall 2020 admissions. American Studies, Anthropology, and History all reported successful recruiting seasons. American Studies recruited four of their top six applicants to the doctoral program. Anthropology recruited three of their top four candidates to their doctoral program; their top-ranked candidate declined an offer of admission in favor of an offer from Columbia with a higher stipend/fellowship package. History secured four of their top ten external applicants to the doctoral program; they lost candidates to Rice, Rutgers, and Georgia. Three of the top students on their waitlist when contacted had already accepted offers from Illinois, Virginia, and Ohio State; they do not recall a year in which so many students from the waitlist had already accepted offers elsewhere. During the week of April 15, in response to the exhaustion of the PhD waitlist, requests from three faculty members, and a straw poll of the graduate committee, they made a PhD offer to a student then enrolled in their terminal master's degree program. The student accepted, giving the department five incoming PhD students for Fall 2020. The Kelso and Zable Recruitment Fellowships helped secure top applicants to all three doctoral programs. All noted that it was an unusual recruitment season, with applicants offered admission electing not to move from institutions that were out-of-state, while in-state applicants were more inclined to accept offers of admission.

For the doctoral programs in the sciences, recruitment successes were mixed. Applied Science recruited for every open lab position across its small faculty body, with one part-time and two full-time doctoral students for Fall 2020. Computer Science filled their incoming cohort of fourteen, experiencing one of their strongest recruiting years ever. The challenge proved to be that the international students were unable to secure visas in time to enter the U.S. for fall classes. As a consequence, two elected to defer their admission to Spring 2021, and two to Fall 2021. The remainder enrolled remotely to attend classes in Fall 2020. The Computer Science faculty – as well as the instructors for the ESL courses offered by the Reves Center – adjusted their class times to allow participation by these students at reasonable hours in their home countries. In Physics, the final number of accepted offers was twelve, which exceeded the department's goal of ten incoming students for Fall 2020, so two recommendations for admission had to be rescinded due to a lack of funding. As with Computer Science, their two international students were not going to be able to secure visas in time to enter the U.S. for the Fall 2020 semester, so both elected to defer their matriculation to Fall 2021. Despite the pandemic, the number of international applicants was stable for all the graduate programs in the sciences (except Applied Science, though the number of enrolled students in APSC makes it difficult to draw meaningful conclusions from this anecdote).

Biology, Chemistry, and Psychological Sciences reported successful recruiting seasons; all were able to fill their entering cohort, though Biology reduced their initial target size by one to preserve financial support for a second-year student whose research had been severely hampered by the COVID-19 shutdowns. All attribute the modest increases to their base stipend involving raises over the past several years, as well as recruitment fellowships, to their success. The departments did lose some of their top candidates to doctoral programs at Columbia University and University of Southern California, among others.

Computational Operations Research reported that their total number of applications for Fall 2020 was similar to previous years. Seven applicants accepted offers of admission including one international students from the Dominican Republic. Two top candidates turned down recommendations for admission choosing to got to programs at University of California, Davis and Rice University; at least two others elected to attend doctoral programs instead. Of note: there were no applications submitted by military officers, and 12 of the 21 submitted applications were from international applicants.

For Fall 2020, Provost Agouris continued suspended admissions to the Master of Public Policy program.

While factors in addition to the composition of financial aid packages figured into candidates' decisions, A&S continues to compete against universities – in particular, private universities – that offer better financial packages. These include not only higher stipends, but also health insurance or health insurance subsidies, as well as research allowances. The limited number of recruitment fellowships we are able to offer can help ameliorate the differences, but do not always overcome them.

Provisions for health insurance coverage or subsidies remain critical for the following reasons:

- **Diversity:** Members of groups traditionally under-represented in academia are those most likely to struggle with the increasingly onerous premium for the mandatory (unless eligible for a waiver) university student health insurance policy. They are most likely to come from families that do not have health insurance coverage or are older, returning students who are not eligible for coverage under the plans of their parents. Some have partners or spouses, but many of their partners or spouses do not have health insurance coverage either. Students with families, particularly international students, are particularly hard hit. The base premium of \$2,490 in 2019-2020 is a 62% increase over the base premium of \$1,541 in 2013-2014. Depending on the discipline, the mandatory premium is between 9.2% and 13.3% percent of an A&S graduate student's pre-tax stipend and summer research fellowship package.
- Competitiveness: In previous years, the Office of Graduate Studies and Research has used a series of base budget increases to institute stipend increases for doctoral students. However, competition remains strong as other universities continue to improve the financial aid packages they offer to incoming students. The A&S doctoral programs have reduced the size of their incoming cohorts in order to increase stipends. Chemistry has increased their supplement to the financial aid package offered to incoming master's students in order to remain competitive. Given that candidates from groups traditionally under-represented in academia are those most likely to receive generous financial aid offers from other universities, graduate program in A&S at W&M struggle to compete with these offers and often do not succeed.
- Undergraduate teaching and mentoring: A&S graduate students enrich the undergraduate program by serving as tutors, writing preceptors, lab and discussion section leaders, teaching assistants, instructors, and graders. They reach and teach hundreds and hundreds of undergraduates per semester in discussions sections such as AMST 202D, AMST 210D, AMST 211D, and HIST 192D; in lab sections such as BIOL 203L and BIOL 204L, CHEM 103L and CHEM 206L, CSCI 140L and CSCI 141L, PHYS 101L, PHYS 102L, PHYS 107L, PHYS 108L, and PSYC 410L-422L; and in courses such as AMST 290, AMST 490, CSCI 140, CSCI 141, CSCI 243, GSWS 205, HIST 121, HIST 211, HIST 212, and HIST 414. They also tutor hundreds of undergraduates in ANTH 200, ANTH 201, ANTH 202, ANTH 203, MATH 111, and MATH 112 (Calculus I & II) as well as the dozens of undergraduates who make full use of the History Writing Resource Center. In addition, A&S graduate student mentors contribute to the success of undergraduate research in a number of disciplines and through their roles as assistants and advisors in the Sharpe Community Scholars Program, the Lemon Project, and the joint degree program with St. Andrews University. It would be challenging for A&S to deliver the undergraduate curriculum and undergraduate research experiences without the invaluable support provided by A&S Graduate Assistants.
- **Faculty retention:** Many members of the A&S graduate faculty would not be able to maintain their research productivity and their ability to obtain external grant and contract funding without the

participation of highly qualified graduate students.

Dean Torczon, the Committee on Graduate Studies, and the Dean of the Faculty of Arts & Sciences have taken the following steps to increase needed support for A&S graduate students:

- 1. In FY 2020, the Dean of the Faculty of Arts & Sciences, in collaboration with the Dean of Graduate Studies and Research, once again submitted a Planning Budget Request asking for further investment in A&S graduate financial aid. For FY 2020, the submission focused on covering the W&M student health insurance premium for all A&S doctoral students on Graduate Assistantships funded by the Office of Graduate Studies and Research. Due to the COVID-19 pandemic and ensuing budget shortfalls at W&M, the W&M Board of Visitors did not approve this or other PBRs.
- 2. In Fall 2014, the Provost used his discretionary authority to establish the Walter J. Zable Graduate Fellowships for the top applicants to doctoral programs in Arts & Sciences, thanks to the generous bequest left by the late Walter J. Zable. This commitment makes it possible to offer recruitment fellowships to five top applicants in the form of a supplementary stipend of \$5,000 per year for the recipient's first two years in the doctoral program, plus up to \$500 to help cover the recipients' research expenses during their first two years. A faculty committee, composed of one representative from each of the six doctoral programs, ranks all the nominees based on the strength of the records they presented for admission. Five graduate students were secured for the Fall 2020 incoming cohort, thanks to this recruitment fellowship: two in American Studies, one in Anthropology, one in Computer Science, and one in History
- 3. In 2015, the Dean of Graduate Studies and Research secured the approval of the members of the GSAB to use their expendable account to establish the A&S Graduate Studies Advisory Board Recruitment Fellowships to help recruit top applicants to master's programs in Art & Sciences. One fellowship is granted to each of the terminal master's programs (only) to use at their discretion when recruiting. Fellows receive a supplementary stipend of \$2,000 per year for the recipient's first two years in the master's program. Given the success of this fellowship, it was continued in FY 2020 and again proved successful in recruiting strong applicants to the A&S master's programs.
- 4. In May 2014, the Dean of Graduate Studies and Research instituted dissertation completion fellowships for doctoral students in American Studies, Anthropology, and History, Initially called the Provost Dissertation Fellowships, in 2019, at the request of the A&S Graduate Studies Advisory Board, they were renamed the Michael R. Halleran Dissertation Completion Fellowships in the Humanities to honor Provost Halleran's ten years of service as William & Mary's provost and to thank him for his dedicated support of graduate programs. This initiative was launched in response to the recommendation found in all three 2014 external review reports for American Studies, Anthropology, and History, that the university institute dissertation completion fellowships to address time-to-degree concerns identified by all three external review committees. Starting with the 2016 Provost Dissertation Fellows, selection is competitive with two faculty members from each of the three doctoral programs ranking applicants based on what of their dissertation they have drafted by the time of review, their plan for finishing their dissertation within a year, and the strength of the letter of support they have received from their primary advisor. Each doctoral student receives a one-year fellowship, with no instructional or other obligations; the recipients are to focus solely on the writing of their dissertation. As of June 30, 2020, all but one of the Recipients in the 2014, 2015, 2016, 2017, and 2018 cohorts had graduated. Seven of the fellows in the 2019 cohort of nine defended in time to graduate by no later than August 2020; the remaining two fellows are now working towards a January 2021 degree. Given the success of the program, particularly as the OGSR has worked to strengthen both the selection and mentoring processes, what had been a trial initiative has now become a standing program in Graduate Arts & Sciences.
- 5. In Fall 2014, Dean of the Faculty of Arts & Sciences instituted a Graduate Research Fund for doctoral students in American Studies, Anthropology, and History to provide competitive research grants in support of their dissertations. Faculty committees in each of these three doctoral programs put forward the top proposals from their students for review by the Director of the A&S Graduate Center, in consultation with the Dean of Graduate Studies and Research. Students are encouraged to demonstrate on their applications that they have secured matching funding from external funding agencies, departmental resources, and will make

in-kind contributions of their own if necessary. In recent years, students have received substantive funding that helped make it possible for them to travel to sites in Canada, Europe, Australia, and across the U.S. to pursue their research. The 2020 Research Fund was suspended due to COVID-19 and no awards were granted. Given prior success of this program, in Fall 2017 the Dean of the Faculty of Arts & Sciences instituted a complementary Graduate Conference Travel Fund for senior doctoral students to provide competitive grants in support of travel to major conferences to present research; the administrative process and matching requirements are equivalent to those for the Graduate Research Fund. In Fall 2019, a total of 9 A&S doctoral students received substantive funding to make attendance possible at major conferences in the U.S. and U.K. The Spring 2020 Conference Fund was suspended due to COVID-19.

Graduate Student Mental Wellness

The mental wellness of graduate students is becoming an increasing concern nationwide. A December 6, 2018 article in **Inside Higher Ed**, *A Very Mixed Result on Grad Student Mental Health* by Colleen Flaherty opens with a summary of the challenges faced by graduate students nationwide:

From impostor syndrome and other feelings of being out of place, to periods of isolation and to constant short- and long-term deadlines, graduate school presents serious potential challenges to students' mental health. There's also financial strain, navigating complex relationships with advisers and colleagues, the job market, and myriad other worries.

The article reports on a new study conducted by researchers at Harvard University that

...calls for more attention to the issue and suggests that the battle can't be fought by graduate students or campus health services alone. Departments, which are responsible for some of the environmental factors that impact students' outlook and health, also must change, the authors insist.

A&S graduate students are not immune to these pressures and at least some do experience environmental factors within their graduate program that impact their outlook and health. In fact, the COVID-19 pandemic, with the ensuing financial disruptions, have further increased anxieties among graduate students as they worry about their health, their inability to conduct their research due to closures and travel restrictions, their financial security, and their job prospects upon graduation in the time of a significant recession.

The Dean of Graduate Studies and Research and the Director of the A&S Graduate Center have been working with the Wellness Center to develop programming that is focused on the challenges particular to graduate students, as well as to make counselors there aware that strategies that are helpful to undergraduate students are not necessarily apropos for graduate students, particularly those in the process of writing dissertations or theses. This is an ongoing partnership. In addition, this coming year the Dean of Graduate Studies and Research will be working particularly closely with COGS members to focus on ways to best support their graduate students in conducting their instructional obligations, research, writing, and job searches.

Graduate A&S Recruitment

In the Fall of 2019, William & Mary welcomed an impressive group of 96 new A&S graduate students in six doctoral programs and eleven master's programs. The applicant pool totaled almost 500 in 2019. More than 77% of the A&S graduate students entering in Fall 2019 had conducted research projects as undergraduate students, with most receiving awards or Honors for their scholarship. Almost 72% had contributed to their communities through volunteer service, and 27% had been teachers or mentors to preschoolers through senior citizens. Approximately 26% of the entering A&S graduate students were international students from 7 countries.

Graduate Student Research and Conference Travel Funds

In Fall 2005, a new initiative to provide competitive support of A&S graduate student research travel, fieldwork, and minor research expenses was instituted by the Office of Graduate Studies and Research (OGSR), with the first awards made in Spring 2006. The purpose of the A&S Graduate Student Research program is to provide seed funding in support of A&S graduate student research.

In 2019-2020, the OGSR awarded a total of \$6,356 to 19 graduate students in Fall 2019, and \$10,482 to 30 graduate students in Spring 2020. The maximum award was \$350. Due to COVID-19 and university restrictions on research and travel, the Summer 2020 funding cycle of OGSR research grants and future funding cycles were suspended until further notice.

The OGSR and the W&M Student Activities Office provide financial support for the A&S Graduate Student Association (GSA) Supplemental Conference Funding. The GSA is responsible for managing the application and selection process for conference travel funding, with priority given to students who are presenting at a conference. Since conference travel funds for A&S graduate students remains an unmet need, starting in Spring 2014 the OGSR raised the cap for each type of supplemental conference travel award by \$100. The OGSR provided \$2,800 for 8 awards in Summer 2019, \$6,700 for 20 awards in Fall 2019, and \$6,750 for 20 awards in Spring 2020. Due to COVID-19 and university restrictions on research and travel, the Summer 2020 funding cycle of GSA conference travel grants and future funding cycles were suspended until further notice.

A&S Graduate Studies Advisory Board

The A&S <u>Graduate Studies Advisory Board</u> (GSAB), created in 2004, enhances the quality of A&S graduate programs in multiple ways, including providing financial support for the following initiatives:

- Recruitment Fellowships: Effective with the Fall 2015 incoming cohort, GSAB recruitment fellowships
 make it possible for each of the five terminal master's programs in A&S to offer, at their discretion, a
 supplementary stipend of \$2,000 per year for the recipient's first two years in the master's program so
 that each of these programs can compete more effectively for their top applicant. In each instance, the
 offer of a recruitment fellowship secured an acceptance from one of the program's top applicants.
- <u>Distinguished Thesis and Dissertation Awards</u>: Established in 2004-2005, these awards recognize
 exemplary achievement in original research that contributes to the discipline. Students are nominated by
 their thesis or dissertation advisor. The theses and dissertations nominated are ranked by a panel of
 faculty scholars. In 2019-2020, three A&S graduates received Distinguished Thesis and Distinguished
 Dissertation Awards, each of which was presented to the recipient at their program's diploma ceremony.
- Graduate Research Symposium: Board members provide substantive financial sponsorship for the
 annual research symposium, as well as serving as active participants. The Graduate Research
 Symposium initially planned for March 20-21, 2020 was cancelled due to the closure of campus in
 response to the COVID-19 pandemic. Instead, the student organizers created a Virtual GRS 2020
 platform where those chosen to present at the symposium could elect to share their research.
- Awards at the Graduate Research Symposium: In addition to providing financial support for the
 organization of the Graduate Research Symposium, the GSAB provided the funding for multiple
 outstanding research awards for both A&S graduate students as well as graduate student participants
 from other universities. The GSAB sponsored two Awards for Excellence in Scholarship of \$1,000 each
 to recognize exceptional A&S graduate student research.
- <u>Carl J. Strikwerda Awards for Excellence</u>: Established in Spring 2011, these awards recognize A&S master's students for their outstanding written papers on thesis research or scholarship to earn an M.A., M.S., or M.P.P. degree. Students submit papers written for the Graduate Research Symposium for consideration by a ranking panel composed of faculty and GSAB members. Three awards of \$250 were awarded to master's students whose papers were judged to be outstanding by the ranking panel.
- S. Laurie Sanderson Awards for Excellence in Undergraduate Mentoring: Established in Spring 2011, these annual awards recognize A&S graduate students for outstanding undergraduate mentoring in scholarship and research outside of classroom teaching. In Spring 2012, board members voted unanimously to rename the awards to honor Laurie Sanderson's contributions to A&S graduate studies during her term as Dean of Graduate Studies and Research from July 1, 2005 to June 30, 2012. Undergraduate mentoring includes, among other examples, graduate students who mentor undergraduates in the context of the undergraduate students' senior theses, honors theses, writing

- projects, term papers, or research in a laboratory, field site, museum, or archive. Undergraduate students and faculty collaborate to nominate graduate students. Four awards of \$250 were awarded in Spring 2020.
- Commencement reception for graduates from the A&S graduate programs: Established in Spring 2014, this reception, with funding by the GSAB, celebrates graduates, their families, and their faculty during Commencement Weekend. Unfortunately, due to COVID-19, the commencement reception was canceled for May 2020.
- Graduate Student Commons: Opened in Fall 2015, board members sponsored, in collaboration with Carrie Cooper, Dean of University Libraries, the construction of a dedicated space for all W&M graduate students. Located on the second floor of Swem Library, across from the Center for Geospatial Analysis, the Commons offers space to store research material, study areas, and a place to collaborate with peers. Graduate students access the space by swiping their W&M ID cards through the card reader at the doors. In addition, the Commons hosts programs tailored for graduate students. In a follow-up partnership with Dean Cooper, the GSAB contributed funds to replace the sofa, armchairs and occasional tables in the Commons while the library replaced all the desk chairs.
- <u>Journal Club</u>: In Spring 2016, members agreed to a request put forward by Andrew Kottick and Sean Koebley, then doctoral students in Applied Science, to partner with the OGSR to provide refreshments for a weekly gathering for sharing research with W&M Arts & Sciences and the W&M Virginia Institute of Marine Sciences (VIMS) graduate students. Their request on behalf of the A&S graduate student population was born out of a desire for graduate students to meet each other, mingle between departments and schools, and to learn about the research being conducted across Arts & Sciences and at VIMS. Given the ongoing success of the students in building an interdisciplinary intellectual community, the GSAB has provided ongoing financial support, with additional support also provided by the OGSR, the A&S Annual Fund, and VIMS, which hosts one event per semester on the VIMS campus. Despite the disruptions caused by the COVID-19 pandemic, students continued Journal Club online through the end of the Spring 2020 semester.
- Graduate Faculty Mentoring Award: In Spring 2018, the Graduate Studies Advisory Board, initiated a partnership with the Provost, the Vice Provost for Research and Graduate Professional Studies, the Dean of the Faculty of Arts & Sciences, and the Dean of Graduate Studies and Research to create an award to recognize outstanding mentoring of graduate students by a member of the Arts & Sciences faculty. This award recognizes faculty adept within the broad spectrum of activities that makes up graduate mentoring. Exemplary graduate mentoring supports the advancement of students as scholars, teachers, and professionals, and requires significant time and skill. The third recipient, acknowledged at the April 2020 Faculty of Arts & Science meeting, was Audrey Horning, Arts and Sciences Distinguished Professor of Anthropology.

In 2019-2020, the GSAB continued to partner with the A&S Graduate Center through the <u>GSAB</u> <u>Mentoring Program</u>, which fosters one-on-one mentorships intended to help students build professional skills. A student is paired with volunteer, who serves as a mentor for the academic year in recognition that graduate students are more successful when they receive mentoring from multiple sources.

The GSAB ended FY 2020 with 22 community, business, and education leaders as fully participating members, as well as two A&S graduate student members selected by the Graduate Student Association. In addition to providing financial support for A&S graduate students and programs, board members advocate on behalf of graduate studies in A&S, as well as coordinate with the A&S Graduate Center and the Cohen Career Center to support professional development opportunities for A&S graduate students.

The Graduate Studies Advisory Board met on campus September 26-27, 2019. The spring meeting, which follows the Graduate Research Symposium, was cancelled due to COVID-19. Board participation in symposium events included six board members who served on the judging panel for the awards which were distributed to the awardees, even though the live symposium had to be cancelled.

The W&M <u>Three Minute Thesis</u> competition was held on October 21, 2019 in collaboration with the School of Education and the Virginia Institute of Marine Science. The GSAB provided the money for the prizes awarded at the event. The OGSR covered the travel expenses of the winner, Amanda Watson, Computer Science, who competed at the 2020 Annual Meeting of the Council of Southern Graduate Schools held in Birmingham, Alabama, March 5-7, 2020.

COGS Highlights

Members of the Arts & Sciences Committee on Graduate Studies met two times during Fall 2019 and five times during Spring 2020. A summary of highlights from their meetings includes:

- To accompany an administrative change in the OGSR, described in the next section, at the request of the Registrar's Office, COGS members added GRAD 999 to the Graduate Arts & Sciences Catalog. GRAD 999 had long been used to register ABD/ABT students eligible for Continuous Enrollment Status, but an entry for GRAD 999 had not been in the catalog. To accompany this addition, COGS members also approved extending the existing grade of 'U' to allow a grade of Unsatisfactory to be given to a student registered for GRAD 999 who is not making satisfactory progress on their dissertation or thesis. In addition, COGS members approved adding the grade of 'S' to the grades allowed so that a grade of Satisfactory can be given to a student registered for GRAD 999 who is making satisfactory progress on their dissertation or thesis.
- COGS members reviewed the <u>Research & Innovation White Paper</u> produced during the strategic planning process, wrote a two-page response following a thoughtful discussion at the February 19, 2020 COGS meeting where the major themes that emerged secured unanimous consensus, and submitted the following response to Provost Peggy Agouris in advance of the February 24, 2020 deadline for submitting comments:

Arts & Sciences graduate programs at William & Mary play a vital role in the university's intellectual ecosystem, enriching the experiences of both undergraduates and faculty. Our master's and doctoral programs—some of which are among the best in the country—advance the goals of the entire university by attracting excellent faculty, enhancing undergraduate research, and elevating our global reputation.

The A&S Committee on Graduate Studies (COGS), composed of the faculty directors of graduate studies from each of the eleven A&S graduate programs, held a productive meeting to discuss the Research & Innovation White Paper and its position regarding graduate study and William & Mary's continued success as a research university. From this meeting, strong consensus emerged on a number of points.

The faculty members of COGS are pleased to see a commitment to the idea of W&M as a top-tier research university. We, too, are deeply invested in the flourishing of this university and its research programs. We are concerned, though, that the R&I white paper overlooks existing strengths in research, and we seek to bring these to the fore of the conversation.

The graduate programs in Arts & Sciences already contribute positively to many areas identified by the R&I subcommittee. Numerous examples of ongoing cross-disciplinary research exchange are visible in A&S. Examples include the long-standing collaboration between Andreas Stathopolous (Computer Science) and Kostas Orginos (Physics), with ongoing funding from both the Department of Energy and the National Science Foundation; the collaboration between Neil Norman (Anthropology) and Gérard Chouin (History), with recent funding from the Department of State; the collaboration between Patty Zwollo (Biology) and Robert Hale (VIMS) with recent funding from the National Oceanic and Atmospheric Administration; and Amanda Watson's (Computer Science) externally-funded research in collaboration with W&M Athletics. Last year's two inaugural VERTs (Vertically Integrated Research Teams) brought together Dan Cristol (Biology) and Matt Anthony (American Studies) and Teresa Longo (Modern Languages and Literatures), Phillip Emanuel (History), Jay Gaidmore (Swem), and Jonathan Frey (Makerspace) who worked with undergraduate students

spanning a range of disciplines. In addition, collaborations exist across units that result in initiatives such as the Graduate Writing Resources Center, a partnership between the A&S Graduate Center and the Writing Resources Center in collaboration with VIMS and Education. Faculty and graduate students in History, American Studies, and Anthropology regularly convene around shared interests through workshops and presentations alongside faculty and students in GSWS, Africana, and Global Studies. We could name more such silo-busting, highly collaborative examples involving Arts & Sciences faculty and students that are central to enriching research and enhancing the appeal of W&M for graduate study.

COGS agrees with the conclusion of the R&I Subcommittee that current infrastructure is inadequate to support continued excellence in research. We would add that this is especially true for our graduate research programs. It should not take three months to hire a postdoc funded by an active research grant or a research scientist when that individual serves as PI on the grant funding the position. Procurement procedures often hinder the purchase of equipment required to meet the research obligations in funded grants. Administrative hurdles create barriers that slow down research and innovation. Other major research universities have staff in a clearly identified central location to help faculty develop grant proposals or fellowship applications, increasing chances of success; William & Mary does not.

We also agree that strengthening partnerships off campus is a worthy venture. Graduate A&S has strong partnerships and collaborative initiatives with neighboring entities such as Colonial Williamsburg, Jamestown Rediscovery, Jefferson Lab, NASA Langley Research Center, and the National Park Service. In addition, multiple A&S faculty have established productive relationships with other labs and corporations, such as BNNT, Cisco Systems, Exxon Mobil Research, Fermi National Accelerator Laboratory, Google, Microsoft Asia, and NEC Laboratories America, that have brought funding to campus and provided internships opportunities for graduate students and SSRL "homes" for faculty.

Additionally, many examples listed in the R&I white paper of existing and emerging areas of excellence at W&M that differentiate the university from our peers are indeed areas where graduate programs and graduate faculty and students are already involved. These include coastal and estuarine science, early American history, high-performance computing, and nuclear and hadronic physics. There are many other existing areas of research excellence not named in the white paper where A&S graduate students and faculty play a key role in producing and promoting this excellence, including African history and the Atlantic diaspora, atmospheric chemistry, computer graphics, digital humanities, historical archaeology, mammalian respiratory neurobiology, NMR structural biology, neutrino physics, programming languages, and software engineering.

However, this excellence is fragile. The A&S graduate programs are small ("boutique" as one graduate faculty member describes them) and operate on shoe-string budgets. This state of fragile excellence makes us vulnerable as a research university. To build on our strengths and differentiate W&M from other institutions, it would be wise to thoughtfully evaluate existing graduate programs and ensure sustainable support is in place before considering an expansion of the number or scope of graduate research programs. As one example, we do not cover the cost of student health insurance premiums for A&S graduate students. A 2006 National Research Council survey revealed that 86% of universities with doctoral programs do. This makes our financial offers to the top applicants to our graduate programs less competitive. Moreover, it means that applicants from disadvantaged backgrounds usually decline our offers, and the applicants who do choose W&M face financial stress to a degree that inhibits flourishing. As another example, we have inadequate lab space to support externally funded research in Computer Science and to support research in Psychological Sciences as the labs in ISC are reported to be at capacity. Similarly, we have no dedicated communal space to draw together our outstanding researchers in the humanities and humanistic social sciences to share ideas and develop collaborations. Further investment is needed in the outstanding graduate programs

we have now. To garner recognition in our areas of excellence requires having a faculty and graduate student population of sufficient size to secure W&M's reputation as a liberal arts and sciences research university.

We also note that there is engineering in Graduate Arts & Sciences, an area noted as lacking in the white paper. Computational Operations Research programs often live in engineering schools at other universities; our program's two faculty co-directors earned PhDs from a school of industrial engineering. The majority of TE faculty members in Computer Science earned PhDs from schools of engineering and do first-rate research on computer hardware and systems. If there is interest in bringing more engineering to W&M, building on these existing strengths makes more sense financially, rather than trying to create new research programs for which we currently have little or no faculty expertise.

The members of COGS are committed to being part of these conversations moving forward, contributing ideas and strategies that will advance research and graduate studies at William & Mary and hence the university's reputation globally. We request that we have a role in decisions that will directly impact the future direction and operation of graduate programs in A&S. We believe that thoughtful investments that bolster the world-class research already going on in A&S is the best way to greatly improve our research visibility on the global stage.

- In response to concerns expressed by A&S graduate students after the university pivoted to fully remote instruction for the second half of the Spring 2020 semester, COGS members approved a Pass/Fail policy for any W&M student enrolled in an A&S graduate-level course. Interestingly, only two students took advantage of the A&S Pass/Fail option for graduate-level courses: a VIMS graduate student and a W&M undergraduate taking an A&S graduate course for graduate degree credit in anticipation of matriculating in a one-year terminal master's program in A&S.
- Following the closure of the W&M campus for the second half of the Spring 2020 semester, COGS members
 also unanimously approved the suspension through August 2020 of the catalog requirement that a student
 defending a dissertation or thesis before their defense examination committee must be physically present for
 the exam.
- Finally, COGS members unanimously agreed to allow applicants to A&S graduate programs for admission in Fall 2020 to be recommended by the A&S graduate program to which they applied and offered admission by the Dean of Graduate Studies and Research using unofficial copies of transcripts and deferred GRE scores in recognition of the many technical and logistical disruptions created by the COVID-19 pandemic.

For those members of the Faculty of Arts & Sciences interested in further details regarding these discussions and decisions, upon request copies of the COGS minutes are available from the Office of Graduate Studies and Research.

Office of Graduate Studies and Research Administrative Highlights

The majority of the administrative highlights were in direct response to the disruptions created by the COVID-19 pandemic. Specifically:

- The OGSR pivoted seamlessly to remote operations when the W&M campus closed for the second half of the Spring 2020 semester in response to the COVID-19 pandemic. Multiple adjustments to policies and practices were made to facilitate this move for graduate students, their faculty advisors, and the administrators in the graduate programs. The office's work flow was changed to accommodate these new policies and practices, and we moved quickly to make adjustments when we encountered hiccups.
- The OGSR worked with the Mission-Critical Exception Review Team to secure approval for processing graduate research fellowships for Summer 2020 and continued funding of A&S graduate students receiving stipends and tuition awards during the 2020-2021 academic year.
- When required to engage in FY21 Mission-Critical Budget Planning, there was unanimous agreement in the OGSR that our top priority was to preserve student financial aid and staff salaries. So, we compiled and

synthesized mission-critical budgeting information in order to identify alternate savings for FY21. By suspending mission-optimal activities for FY21, we were able to realize \$210,000 in savings without compromising the student financial aid budget we manage. In particular, with on-campus events suspended for the foreseeable future, our signature events of the year (e.g., new-student orientation, the A&S Graduate Research Symposium, the Raft Debate, and the May Commencement reception) could not be held. Further, we decided that some expenses such as competitive research and conference travel awards to A&S graduate students could be suspended with the expectation that resources within the individual graduate programs could help cover such awards should travel restrictions eventually be lifted during FY21. We also suspended our budget for participation in and travel to professional conferences oriented towards those of us working in support of graduate students and either suspended our professional dues for FY21 (Council of Southern Graduate Schools) or asked that the professional organization suspend dues collection for FY21 (Virginia Council of Graduate Schools).

• With the realization that the multi-hour in-person new student orientation held each year on the Monday before the first day of classes for the new academic year could not be held, Sarah Glosson recognized that the delivery would have to go online. In what was a truly heroic effort, in under two months Sarah stood up a brand new, asynchronous, fully online set of new student orientation modules with captioning. Everyone in the OGSR is grateful for the help Sarah received from our partners across campus, including the Studio for Teaching and Learning Innovation, Kelly Crace, and Sharron Gatling, to ensure that the crucial information our new students need to know as they start their careers at graduate students was available and accessible to them.

There was one new major administrative policy instituted for 2019-2020, and one standing obligation was fulfilled:

- The OGSR worked with the Registrar's Office to establish individual sections of GRAD 999, Continuous Enrollment, for each A&S faculty member engaged in advising students writing a dissertation, thesis, or research projects to satisfy degree requirements, and requiring the faculty member's advisees to register for the section for which their primary advisor is the instructor of record. With the expansion of the use of the grade 'U' approved by COGS, as noted above advisors can now use the grade of 'U' to flag when a student is not making satisfactory progress on their research. Such cases would be when the student is not responding to their advisor, attempts to reach out to the student have been ignored, or deadlines for the submission of drafts of chapters have been consistently missed. Otherwise, the student receives a grade of 'S' (satisfactory) for the semester. This change to allow individual sections of GRAD 999 with the student's primary advisor as the instructor of record was an extension to the introduction of individual sections of 700, Thesis, 710, Research Project, and 800, Dissertation that was introduced across all of the A&S graduate programs last year. With the addition of GRAD 999, advisors now are responsible for recording whether ABD/ABT students are making satisfactory progress on their dissertation or thesis, regardless of their registration status.
- On October 22, 2019, the Dean of Graduate Studies and Research satisfied the requirement established by COGS at their October 13, 2011 meeting, that a statement be sent, annually, to the faculty members in A&S graduate programs regarding the importance of timely feedback on dissertations and theses.

Course Approvals and Revised Degree Requirements

ANTHROPOLOGY

The following changes were approved by COGS on May 13, 2020.

The Anthropology Program

The Department of Anthropology at William & Mary offers a Master's and a Ph.D. program. The M.A. in Historical Archaeology is a terminal degree designed to prepare students for careers in historical archaeology and related professions. The Ph.D. program, with specializations in Historical Archaeology and Historical Anthropology, is designed to prepare students for research, professional and teaching positions in Anthropology.

Admission

Students have the option of enrolling directly into the M.A.-only program, into the sequential M.A./Ph.D. program, or into the Ph.D. program. Applicants to the Ph.D. program must have completed the Anthropology M.A. degree, either at William & Mary or at another institution. Students who have completed an M.A. in a discipline closely related to Anthropology may petition the Graduate Committee to determine whether their degree may be accepted in lieu of an M.A. in Anthropology.

Admission is competitive, based on such criteria as grade point average, GRE scores, letters of recommendation, experience, and educational history. Minimally, each applicant must have a Bachelor's degree in anthropology, history, or a related discipline, and a 3.0 grade average (on a 4.0 scale). Graduate studies begin in the fall; there are no spring admissions.

William & Mary uses an online application system. Application materials consist of GRE scores taken within the past five years, transcripts, three letters of recommendation, and a writing sample. If English is not your first language, your Test of English as a Foreign Language (TOEFL) or International English Language Testing System (IELTS) scores are required and must be sent directly to William & Mary by the Educational Testing Service or IELTS. The TOEFL/IELTS requirement can be waived for applicants who will have received a degree from a college or university in which English is the primary language of instruction. A transcript is required as evidence of successful instruction in English as a primary language. For full consideration, applications and all supporting materials for both the M.A. and the M.A./Ph.D. programs must be received by December 15. Applications submitted after the program deadline may be evaluated if space is available. The Ph.D. programs in Anthropology at William & Mary require full-time study. Full-time and part-time students will be considered for admission into the M.A.-only program.

ANTH 528 - Methods in Archaeological Science

Fall or Spring (4) Kahn. Note: There will be 1.5 hours of lecture/class discussion and 1.5 hours of lab/discussion per week.

This survey and lab course focuses on the application of scientific methods of analysis to archaeological materials, including stone, bone, coral, charcoal, plant remains, and other organic materials. The emphasis will be on the history of archaeological science within the discipline and current advances in physical science applications in archaeology. Topics to be covered include Dating Techniques (Relative and Absolute, with an emphasis on Chronometric techniques), Geomorphology, Soils Analysis, and Environmental Reconstruction; Compositional Analysis, Materials Analysis, and Technology; Microscopy and Provenance Studies. At least half of the course will involve hands on learning with archaeological materials and datasets in the lab.

Anthropology, Historical Archaeology or Historical Anthropology Specialization, PhD

The doctoral program in Anthropology is designed for students who have completed an M.A. in Anthropology, or a closely related discipline, and wish to pursue original, advanced research toward a doctorate specializing in Historical Archaeology or Historical Anthropology.

Course Requirements

ANTH 600 – Socio-Cultural Theory (3)

ANTH 603 – Archaeological Theory (3)

ANTH 640 – Presentation and Paper (3)

ANTH 800 - Ph.D. Dissertation (24 total credits)

Electives

Course electives shall include one graduate-level course in Linguistic Anthropology and one graduate-level course in Biological Anthropology. Students will use the remaining electives to focus their studies in either Historical Archaeology or Historical Anthropology. Selection of electives should be made in consultation with the advisor to ensure an appropriate course of study.

With permission from the department's Director of Graduate Studies and the Dean of Graduate Studies, students are encouraged to take graduate courses in History, American Studies, and other disciplines.

Residence Requirement

Ph.D. students will spend at least four years of full-time graduate study in residence at William & Mary.

Satisfactory Progress

To be eligible to graduate, all students must achieve a cumulative grade point average of 3.0 on a 4.0 scale in all courses undertaken for graduate credit at William & Mary after admission to a degree program. No credit toward a degree will be allowed for a course in which a student receives a grade below C (grade point = 2.0). Any student receiving two grades of "C" or below in any semester will be withdrawn from the program at the end of that semester.

All requirements for the Ph.D. must be completed within seven (7) years from the first term of enrollment in the Ph.D. program, excluding periods of approved leave and military service.

Presentation & Paper Requirement

By the last day of the Spring semester of their first year all students in the Ph.D. program are required to submit to the Director of Graduate Studies a one-page prospectus in anticipation of their fourth-semester "Presentation and Paper," along with a list of at least three Presentation and Paper Evaluation Committee members from the Anthropology Department. All students in the Ph.D. program will complete the Presentation and Paper process during their fourth semester. Fourth-semester students will enroll in the Presentation and Paper class (ANTH 640), write an article-length paper in conjunction with the class that engages questions of anthropological significance, and present the paper to the department by the end of the academic year.

Once the course is complete, the student's Presentation and Paper Evaluation Committee will evaluate the work and determine whether the student will continue with the Ph.D. program or require withdrawal of the student. Normally, the Presentation and Paper Evaluation Committee will serve as the core of the student's Ph.D. Committee.

Draft Grant Proposal Requirement

During the summer between their second and third years in the doctoral program, all students will write a Draft Grant Proposal designed to support the student's dissertation research, targeting one of the principal granting agencies in Anthropology (e.g., Wenner-Gren, National Science Foundation, or Fulbright-Hays). Students will consult with their advisor to determine the target granting agency and thus the style that the proposal will take. Draft Grant Proposals should engage with a research question of broad anthropological significance in a particular setting and demonstrate fluency in the related literature. Draft Grant Proposals should be submitted to the Director of Graduate Studies by December 15th of the student's third year. The Draft Grant Proposal will

serve as the foundation for the Dissertation Project Proposal.

Qualifying Exam Requirement

No later than the last day of the Spring Semester of their third year of study all students must take an oral qualifying exam conducted by the student's primary dissertation committee. This exam will explore key theoretical concerns and methodological issues related to the dissertation as well as ethnographic, historical and archaeological data that form a background to their research.

Dissertation Project Proposal Requirement

By the end of the eighth semester of graduate study each student, in cooperation with their advisor and committee, will finalize and present the Dissertation Project Proposal, which will be defended at a meeting open to all faculty members and students in the Anthropology Department and any guests they might invite. The Dissertation Project Proposal is evaluated by the student's dissertation committee. Upon successful completion of the Dissertation Project Proposal, students are considered dissertation candidates with All But Dissertation (ABD) status.

Dissertation Requirement

Each candidate for the Ph.D. must submit an acceptable dissertation based on original research and constituting a contribution to scholarly knowledge. The dissertation will be defended at a meeting open to all faculty members and students in the Anthropology Department and any guests they might invite. The defense is evaluated by the student's dissertation committee.

Language Requirement

Before the end of the Spring Semester of the third year in the program, each student must pass a reading examination in a language relevant to their research interests and useful in reading the literature in their field of study.

Anthropology, Historical Archaeology or Historical Anthropology Specialization, Sequential M.A./Ph.D. The sequential M.A./Ph.D. program in Anthropology is designed for students who have not yet completed a M.A. in Anthropology and wish to pursue original, advanced research toward a doctorate specializing in Historical Archaeology or Historical Anthropology.

Course Requirements

To complete the M.A. Degree, students will complete 30 credits of coursework including:

ANTH 600 – Socio-Cultural Theory (3) ANTH 603 – Archaeological Theory (3) ANTH 640 – Presentation and Paper (3)

ANTH 700 – Thesis (6 total credits)

Once admitted into the Ph.D. program, students will complete an additional 36 credits of coursework, including: ANTH 800 – Dissertation (6 total credits)

Students shall take two elective courses including one graduate-level course in Linguistic Anthropology and one graduate-level course in Biological Anthropology. Selection of electives should be made in consultation with the advisor to ensure an appropriate course of study.

Students will use other electives to focus their studies in either Historical Archaeology or Historical Anthropology. Selection of electives should be made in consultation with the advisor to ensure an appropriate course of study.

Presentation & Paper Requirement

By the end of the Spring Semester of their first year students are required to submit to the Director of Graduate Studies a one-page prospectus in anticipation of their fourth-semester "Presentation and Paper", along with a list of at least three Presentation and Paper Evaluation Committee members from the Anthropology Department.

All students in the Ph.D. program will complete the Presentation and Paper process during their fourth semester. Fourth-semester students will enroll in the Presentation and Paper class (ANTH 640), write an article-length paper in conjunction with the class that engages questions of anthropological significance, and present the paper to the department by the end of the academic year.

Once the Presentation and Paper process is complete, student's Presentation and Paper Evaluation Committee will evaluate the Presentation and Paper and determine whether the student will continue in the Ph.D. program, be awarded a terminal M.A., or required to withdraw. For sequential M.A./Ph.D. students, the student's Presentation and Paper Evaluation Committee will also serve as the M.A. Committee. Normally, the Presentation and Paper Evaluation Committee/M.A. Committee will serve as the core of the student's Ph.D. Committee.

Thesis Requirement

Submittal of the paper presented as part of ANTH 640 - Presentation and Paper to the Office of Graduate Studies and Research fulfills the M.A. thesis requirement. Thesis and paperwork must be submitted in time for August conferral.

Qualifying Exam Requirement

No later than March of their third year of study all students must take an oral qualifying exam conducted by the student's primary dissertation committee. This exam will explore key theoretical concerns and methodological issues related to the dissertation as well as ethnographic, historical, and archaeological data that form a background to their research.

Dissertation Requirement

Each candidate for the Ph.D. must submit an acceptable dissertation based on original research and constituting a contribution to scholarly knowledge.

Dissertation Grant Proposal Requirement

During the summer between their second and third years in the doctoral program, all students will write a draft grant proposal designed to support the student's dissertation research, targeting one of the principal granting agencies in Anthropology (e.g., Wenner-Gren, National Science Foundation, or Fulbright-Hays). Students will consult with their advisor to determine the target granting agency and thus the style that the proposal will take. Draft grant proposals should engage with a research question of broad anthropological significance in a particular setting and demonstrate fluency in the related literature. Draft grant proposals should be submitted to the Director of Graduate Studies by September 1 of the student's third year.

By the end of the eighth semester of graduate study each student, in cooperation with their advisor and committee, will finalize and present the dissertation grant proposal. The proposal will be defended at a meeting open to all faculty members and students in the Anthropology Department and any guests they might invite. The defense is evaluated by the student's dissertation committee.

Language Requirement

Before the beginning of their fourth year in the program, each student must pass a reading examination in a language relevant to their research interests and useful in reading the literature in their field of study.

Residence Requirement

Students in the M.A./Ph.D. program will spend at least four years of full-time graduate study in residence at William & Mary.

Satisfactory Progress

To be eligible to graduate, all students must achieve a cumulative grade point average of 3.0 on a 4.0 scale in all courses undertaken for graduate credit at William & Mary after admission to a degree program. No credit toward a degree will be allowed for a course in which a student receives a grade below C (grade point = 2.0). Any student receiving two grades of "C" or below in any semester will be withdrawn from the program at the end of that semester.

All requirements for the Ph.D. must be completed within seven years from the first term of enrollment in the Ph.D. program, excluding periods of approved leave and military service. For a student enrolled in a master's program in the College of Arts & Sciences who subsequently advances to candidacy in the doctoral program in the same field, the terms of enrollment in the master's program will count towards the seven-year limit for the doctoral degree unless otherwise stated in the letter of admission.

Anthropology, Historical Archaeology Specialization, MA

The Master of Arts program is designed to train students for proficiency in the general field of Anthropology with a specialization in Historical Archaeology. This is a terminal degree.

Course Requirements

Each student in the M.A.-only program must successfully complete 30 semester hours of graduate coursework, including:

ANTH 600 - Socio-Cultural Theory (3)

ANTH 603 – Archaeological Theory (3)

ANTH 700 – Thesis (a total of 6 credit hours). All students will register each semester for ANTH 700 (Thesis) in addition to the normal course load of 12 semester hours.

Electives

Upon approval of the department's Director of Graduate Studies, students may schedule up to six graduate credits in courses in other departments or programs not cross-listed under Anthropology.

Thesis Requirement

Each M.A. student will write a thesis on a research topic approved by the Director of Graduate Studies and the student's thesis committee. The thesis should be article length and of publishable quality. It should contain a clearly stated problem, relevant data, and theoretically informed analysis. Although not required, it is highly recommended for MA-only students to complete their thesis through the Presentation and Paper process.

Exam Requirement

The thesis, supplemented by an oral defense before a faculty committee, meets the exam requirement.

Language Requirement

There is no language requirement for the M.A. degree.

Residence Requirement

Full-time students are expected to remain in residence while they complete the entire 24 semester hours of classes and 6 hours of ANTH 700 - Thesis. Typically, this is done by the end of the second semester of residence, though some students elect to extend the coursework over three semesters.

Satisfactory Progress

To be eligible to graduate, all students must achieve a cumulative grade point average of 3.0 on a 4.0 scale in all

courses undertaken for graduate credit at William & Mary after admission to a degree program. No credit toward a degree will be allowed for a course in which a student receives a grade below C (grade point = 2.0). Any student receiving two grades of "C" or below in any semester will be withdrawn from the program at the end of that semester.

All requirements for the master's degree must be completed within six (6) years from the first term of enrollment in the master's program, excluding periods of approved leave and military service. Requests for extension beyond the six (6) year limit must be filed following the procedures outlined in Time Limits for Degrees and Extensions in the Graduate Arts & Sciences Catalog.

APPLIED SCIENCE

The following changes were approved by COGS on May 13, 2020.

COURSE ADDITION:

APSC 528 - Scanning Probe Nanoengineering: Visualization and Manipulation of Matter at Atomic Scales Fall (3) Schniepp. Prerequisite(s): Instructor approval.

The ability to engineer smaller and smaller structures and devices has enabled great progress across many disciplines ranging from microelectronics to biomedicine. Scanning probe techniques, including scanning tunneling microscopy and atomic force microscopy, have been transformational and inspiring tools to visualize, study, and govern the nanocosmos: they have allowed us not only to image structures of atomic dimensions but also helped us to measure molecular-scale forces and interactions, and they have enabled manipulation, building, and milling of things at the nanoscale. This class covers the fundamental relationships governing the interactions of objects and structures at such small length scales. Connections are made between nanoscale behavior of materials and their practical consequences for everyday macroscale phenomena. Designs, imaging modes and capabilities of the scanning probe microscopes are discussed, as well as their application for nanoengineering and sensing. These techniques are discussed in the context of many other micro- and nanoscale manufacturing methods, which are also introduced. The class includes hands-on computer simulations and a hands-on tour of a state-of-the-art scanning probe microscopy laboratory.

BIOLOGY

The following changes were approved by COGS on May 13, 2020.

Effective with the 2018-2019 Undergraduate Catalog, EPC approved renumbering the department's introductory biology sequence. As a consequence, in the Graduate Arts & Sciences Catalog all references to BIOL 225, Introduction to Molecules, Cells, Development, need to be replaced with BIOL 203, Introduction to Molecules, Cells, Development, and all references to BIOL 220, Introduction to Organisms, Ecology, Evolution, need to be replaced with BIOL 204, Introduction to Organisms, Ecology, Evolution.

BIOL 517 - Population and Community Ecology

Spring Fall (4) Dalgleish. Prerequisite(s): BIOL 204 302 and BIOL 325 304 or BIOL 327 or any approved statistics course or equivalents

Discussion of the structure and dynamics of ecological populations and biotic communities. Emphasis will be on environmental constraints and species interactions that control population growth and determine both diversity and similarities in community structure and function. Three class hours, three laboratory hours.

BIOL 527 - Wetland Ecosystems

Fall (34) Chambers Corequisite(s): BIOL 220 and BIOL 225 or equivalent BIOL 527L Prereq/Corequisite(s): BIOL 203 and BIOL 204 or equivalent.

Wetlands typically occur at the nexus between terrestrial and open water habitats, with some notable exceptions. All wetlands, however, exhibit distinct features that are best described by the unique hydrologic conditions, soils development, and plant species that evolved to occupy these ecosystems. In this course, we will explore how water, soils and plants combine to create different wetland types, from coastal saltwater marshes to bogs to

prairie potholes to inland freshwater swamp forests. BIOL 527L, field trips to different local wetland ecosystems to supplement lecture materials, is required. Because of the ecological and economic importance of wetlands in providing various habitat functions for wildlife and ecosystem services to humans, we will review the history of wetland destruction, creation/restoration, and legal protection. Cross-listed with BIOL 427

COURSE ADDITION:

BIOL 553 - Protein Structure and Function

Fall (3) Hinton. Prereg/Corequisite(s): BIOL 310, BIOL 314 or CHEM 314 or consent of instructor

The functionality of a protein is an integral part of its structure. This course provides a comprehensive analysis of how to use sequence data to understand a protein's physical properties, and to predict its function and interaction. Three class hours. Cross-listed with: BIOL 453 and CHEM 453

CHEMISTRY

The following changes were approved by COGS on November 4, 2019.

COGS voted unanimously to approve Chemistry Department petitions to approve the graduate courses listed below with variable credit (1-3 for all) for both fall and spring semesters.

- CHEM 652 Topics in Physical Chemistry, Spring (3)
- o CHEM 654 Topics in Inorganic Chemistry, Spring (3)
- CHEM 655 Topics in Analytical Chemistry, Fall (3)
- CHEM 656 Topics in Organic Chemistry, Fall (3)
- CHEM 664 Topics in Biochemistry, Fall (3)

CHEM 515 - Advanced Biochemistry Fall (3) Young.

A continuation of the study of biological processes on a molecular level begun in CHEM 313 314 or BIOL 314. Membrane biochemistry, molecular immunology, protein structure and function, biochemical applications of genetic engineering, and other topics of current interest.

COMPUTER SCIENCE

The following changes were approved by COGS on April 1, 2020.

COURSE ADDITION:

CSCI 545, Mobile Application Security

Prerequisite(s): CSCI 301 (Software Development) Note: CSCI 545 students will complete an independent research project, culminating in a 10-12 page conference-style research paper, for 40% of the credit; instead of the predefined undergraduate project.

The course will cover topics including (but not limited to) security basics, application of crypto in mobile apps, storage in mobile applications, secure network communications, inter-application data flows, user privacy, static and dynamic analysis, manual analysis, using NLP in application analysis, and other emerging topics. Cross-listed with CSCI-445

COMPUTATIONAL OPERATION RESEARCH

The following changes were approved by COGS on April 15, 2020.

COGS voted to approve replacing MATH 401 with MATH 451 for CSCI 668, CSCI 678 and CSCI 698.

COGS voted to approve the request to remove CSCI 303 as a pre-requisite for CSCI 658.

GRADUATE REGULATIONS

The following changes were approved by COGS on November 4, 2019.

COURSE ADDITION:

GRAD 999 - Continuous Enrollment

Fall and Spring (0) Graded Satisfactory/Unsatisfactory

Continuous Enrollment status allows students to maintain active graduate student status with William & Mary and to access some William & Mary resources, including the libraries, email, and laboratories.

To secure Continuous Enrollment status, the student must request permission from their program to enroll in GRAD 999 and must pay the Continuous Enrollment Fee. A student in Continuous Enrollment status may not register for any other credit-bearing courses at William & Mary.

A&S: Grading and Academic Progress

S indicates satisfactory performance for the term in 999, Continuous Enrollment. A grade of S carries no credit towards the graduate degree.

U indicates unsatisfactory performance for the term in either 700, Thesis, 710, Research Project, 800, Dissertation or 999, Continuous Enrollment. U also is used to indicate an unsuccessful audit. A grade of U carries no credit towards the graduate degree.

Graduate Center Annual Report 2019

Staff and Facilities

The Graduate Center organizes and sponsors a variety of activities, events, and zero-credit courses for A&S graduate and professional students. Sarah Glosson, Director of the Arts & Sciences Graduate Center, administers the Center, which resides in Stetson House at 232 Jamestown Road.

In Fall 2019, Spring 2020, and Summer 2020, four W&M faculty and staff members taught twelve Graduate Center courses. The Graduate Center continued to work collaboratively with other W&M offices and schools to expand the scope of activities and events offered in order to enhance the participation of all A&S graduate students, as well as W&M undergraduate students when appropriate.

Graduate Center Highlights

Appendix I provides a listing and summary of participation in selected Graduate Center activities, events, and courses since Fall 2012.

- GRAD Courses: Total course enrollment for the calendar year was 84. The students enrolled were a mix of domestic and international graduate students from A&S and Education. The director of the Graduate Center continued a process of reviewing and updating the GRAD course curriculum to better address current needs of A&S graduate students. The revised English language courses have proved to be successful. In order to better fit students' schedules and research demands, many GRAD courses are offered as one-week "boot camps" rather than as 10-week courses.
- **3MT**: In October 2019, the Graduate Center offered the fourth Three Minute Thesis Competition hosted by Arts & Sciences. The OGSR and GSAB sponsored \$1,000 in prizes. Eleven students competed before an audience of over 100 and a panel of four judges. Raffle prizes for the audience and other supplies for the event were sponsored by the GSAB. The event was held in Commonwealth Auditorium.
- **Graduate Writing Resources Center**: The Graduate Center partners with the Writing Resources Center to offer graduate-level writing consultation at the Graduate Writing Resources Center (GWRC). In 2019-20, 5 graduate students from A&S and one in Education were hired and trained in peer writing consultation at the graduate level.). Write-Ins, a GWRC sponsored opportunity for lightly facilitated quiet writing time, continued to be popular with 9 sessions (Saturdays) in the fall and 8 sessions in the spring.
- Professional Development Workshops: In partnership with individual graduate programs, W&M
 Libraries, the Cohen Career Center, the Wellness Center, and the Reves Center, the Graduate
 Center offered/supported nine workshops and panels on a variety of topics including Academic
 Writing, Preparing for the Scientific Job Market, Tips for Oral Presentations, Scholarly Publishing
 and Author's Rights, Applying for Fellowships, Bibliography and Citation Management, and more.
 Attendance across all workshops totaled roughly 83 attendees. Fewer workshops were offered in
 Spring 2020 due to COVID-19.
- **GSAB Mentoring Program**: The goal of this program is to foster one-on-one mentorships intended to help students build professional skills. In 2019-20, eleven students signed up to participate and 11 GSAB members and other alumni served as mentors. Mentors help direct students toward resources and key connections in their fields and discuss a variety of career-building topics.

Other Activities Sponsored by the Office of Graduate Studies and Research

- Graduate Research Symposium: We made the difficult decision to suspend the Graduate Research Symposium initially planned for March 20-21, 2020 due to the closure of campus in response to the COVID-19 pandemic. Instead, the organizers created a Virtual GRS 2020 platform where those chosen to present at the symposium could elect to share their research. A&S graduate students on the 2019 Graduate Research Symposium Committee and the Graduate Student Association worked with the Office of Graduate Studies and Research and the Graduate Center. The 2019 Graduate Research Symposium was highly productive, with 140 oral and poster presentations and a total of more than 1100 attendees at symposium events. Presenters included 35 graduate students from 14 visiting institutions, including Brandeis University, Drew University, George Mason University, Georgetown University, University of Pennsylvania, University of Virginia, Virginia Commonwealth University, and Virginia Tech. Based on papers submitted by presenters and ranked by a judging panel of A&S faculty and Graduate Studies Advisory Board members, awards totaling \$10,000 were provided to W&M graduate students and visiting student scholars. To recognize the significance of the GRS the Interdisciplinary Award for Excellence in Research was created. The top three papers submitted in the category of W&M Humanities and the top three papers submitted in the category of W&M Natural and Computational Sciences completed for the overall award for Excellence in Research. In 2019, the Interdisciplinary Awards was given to David Marguis, a Ph.D. candidate in the department of History. The Graduate Studies Advisory Board was a symposium sponsor in 2019 and board members also participated in the symposium by chairing oral sessions, serving on the judging panels, offering recruitment and mentoring opportunities, and providing two awards of \$1,000, each, as well as corporate sponsorship for the symposium.
- Raft Debate: The annual debate was scheduled for Thursday, March 19, 2020 the first week the campus closed due to COVID-19. The Raft Debate numbers among the favorite traditions featured on the William & Mary webpage http://www.wm.edu/about/history/traditions/index.php. So the plan is to hold the debate, with the participants who had been scheduled, as soon as it is safe to arrange an in-person on-campus debate in a venue that can accommodate a large number of attendees.
- Newsletter: The Graduate Center's Graduate A&S Newsletter (formerly Did You Know That?) is
 distributed by email to A&S graduate students as well as faculty and staff affiliates every Monday
 during the academic year. Each academic year there are approximately thirty issues of the
 newsletter. Entries include links to Events posted in the A&S Graduate Studies & Research Events
 Calendar, as well as to webpages containing pertinent information. The format and organization
 were substantially revised in 2018-19 to improve readability.

A&S Graduate Ombudsperson Report for July 2019 - June 2020

Philip H Daileader, Professor, Department of History, phdail@wm.edu

A total of three graduate students and two Department Chairs contacted the ombudsperson for consultation. William & Mary's COVID-19-related campus closure in March 2020 almost certainly lowered the number of graduate students who contacted the ombudsperson, as the end of the academic year is typically the ombudsperson's busiest time.

Graduate students consulted with the ombudsperson regarding issues of intellectual property, work relationships, and mental health resources. Department Chairs consulted with the ombudsperson regarding the termination of advisor/advisee relationships, and regarding allegations brought to Department Chairs by graduate students alleging psychological abuse at the hands of faculty members. In all cases, the ombudsperson helped graduate students and Department Chairs to devise solutions that would serve the graduate students' best interests. Specifically, the ombudsperson provided relevant information to consultants, discussed possible courses of actions with them, and, in the case of Department Chairs, helped to devise solutions that ended current problems and served to prevent future recurrences.

The time-scale of meetings varied widely, with the simplest matters resolved in a week or so, and more complex matters requiring several weeks of meetings and discussions.

In addition to individual meetings with graduate students, faculty members, and Department Chairs, the ombudsperson participated in the August 2019 Graduate Student Orientation program, speaking to graduate students about the ombudsperson's office and its availability to them.

The ombudsperson maintained an awareness of the decisions made by Committee on Graduate Studies as well, in order to understand the current state of graduate education at William & Mary as fully as possible, especially as regards curricular requirements.

As of 30 June 2020, all cases brought to the ombudsperson had been resolved.

Committee on Graduate Studies Members, 2019-20

Virginia Torczon, Chair
Hannah Rosen, American Studies
Neil Norman, Anthropology
Myriam Cotten, Applied Science
Diane Shakes and Patty Zwollo (co-directors), Biology
Robert Pike, Chemistry
Pieter Peers, Computer Science
Rex Kincaid, Computational Operations Research
Paul Mapp, History
Jeff Nelson, Physics
Danielle Dallaire, Psychological Sciences
Elaine McBeth, Public Policy

APPENDICES

APPENDIX I

GRADUATE CENTER PARTICIPATION Fall 2015 - Summer 2020

Course	F 2015	S 2016	Summer 2016	F 2016	S 2017	Summer 2017	F 2017	S 2018	Summer 2018	F 2018	S 19	Summer 2019	F 19	S 20	Summer 20
GRAD 501 001	11			11			9			5			5		
GRAD 502-01															
GRAD 503 001		9			7			8		9			5	9	
GRAD 503 002		9		40							40				
GRAD 505 001	11			12	9		8	3			10			9	
GRAD 505 002 GRAD 510										7	3		8		-
GRAD 510									6	10	3	7	<u> </u>		+
GRAD 512 GRAD 520 001					8		5	5	0	10	7		6		+
GRAD 522					4		J	3		4	'	1	5		+
GRAD 529			8			8			8	-		9			8
GRAD 530 001	10	10		8	8	Ŭ	9	7	Ŭ	8	8	<u> </u>	9	9	
GRAD 530 002	5							-							
GRAD 540 001						9	9	13			6			3	1
GRAD 540 002							9	6			8				
GRAD 550		6					4								
Course Subtotals	37	40	8	31	36	17	53	42	14	43	42	16	44	30	8
Workshops	F 2015	S 2016	Summer 2016	F 2016	S 2017	Summer 2017	F 2017	S 2018	Summer 2018	F 2018	S 19	Summer 2019	F 19	S 20	Summer 20
Poster Workshop - Research Symposium					7										
Oral Presentation Skills Workshop - Symposium					2										
Academic Writing in the US				11			18			25			6		
CV for the Humanities				29											
Job Market for the Humanities				12				8							
Prep for Provost Disseration Fellowship Application				12			13	-		8		1	12		1
CV for the Sciences				8								1			1
Preparing for the Scientific Job Market								23				1		10	+
History Careers				21				20				1		10	+
Alt-Ac-Careers				16						6		1		5	+
				11				8	0	7		9		3	+
ETD/Copyright/Embargo				11	2 16		0	0	8	/		9			
Digital Identity Roundtable/Digital Scholarship					16		8								+
Writing Skills for Chemistry							9			4			24		
Oral Presentation Skills for Computer Science					35					35					
Grants and Fellowship Applications - Humanities					21										
Bibliographies & Citations Made Easy										11			13		
Author's Rights & Publishing											7		2		
Elevator Pitch (Symposium)											6				
3MT Presentation Workshop							10			9			11		
Workshop Subtotals	0	0	0	120	83	0	58	39	8	105	13	9	68	15	0
Programs	F 2015	S 2016	Summer 2016	F 2016	S 2017	Summer 2017	F 2017	S 2018	Summer 2018	F 2018	S 19	Summer 2019	F 19	S 20	Summer 20
Graduate Research Symposium		1200			1100			1100			1000			*	
Raft Debate	675			675				465			650			*	
Program Subtotals	675		0	675	1100	0	0	1565	0	0	1650	0	0	0	0
GRAND TOTAL	712	1240	8	826	1219	17	111	1646	22	148	1705	25	112	45	8

^{*}due to COVID-19 the GRS and Raft Debate were postponed

APPENDIX II APPLIED, ACCEPTED and ENROLLED Fall 2015 - Fall 2019

		Applied	Acc	epted	Enr	olled	Avg UG ⁽¹⁾	Av	g GRE Score	s ⁽²⁾
		Applied	Total	Rate	Total	Rate	GPA	Verbal	Writing	
	2015	64	11	17%	4	36%	3.86	163	152	5.00
	2016	52	17	33%	8	47%	3.67	161	153	4.63
American Studies	2017	41	20	49%	10	50%	3.59	157	139	4.25
	2018	39	15	38%	7	47%	3.69	162	153	5.08
	2019	24	13	54%	6	46%	3.10	162	151	4.41
	2015	39	7	18%	3	43%	3.72	164	157	5.16
Anthropology	2016	47	9	19%	5	55%	3.76	152	156	3.75
	2017	39	13	33%	5	38%	3.65	163	155	5.00
	2018	37	11	30%	6	55%	3.73	163	148	4.17
	2019	47	11	23%	6	55%	3.40	156	Math 152 153 139 153 151 157 156 155	3.83
	2015	29	11	38%	5	45%	3.31	149		3.10
	2016	37	8	22%	6	75%	3.24	154		4.00
Applied Science	2017	44	16	36%	10	63%	3.71	154	161	3.55
	2018	20	6	30%	4	67%	3.74	161	163	4.00
	2019	13	6	46%	6	100%	3.30	158		3.75
	2015	74	11	15%	9	82%	3.66	158	157	4.40
	2016	67	13	19%	8	62%	3.49	159		4.62
Biology	2017	44	10	23%	8	80%	3.60	162		4.70
2.0.03)	2018	40	12	30%	8	67%	3.85	163	158	4.71
	2019	56	17	30%	8	47%	3.60	159		4.38
	2015	17	6	35%	3	50%	3.64	159		4.50
Chemistry	2016	18	7	39%	6	86%	3.68	162		4.58
	2017	28	11	39%	6	56%	3.42	157		4.10
	2018	18	7	39%	5	71%	3.40	161		4.38
	2019	13	6	46%	6	100%	3.30	157		3.91
	2015	166	60	36%	20	33%	3.50	650 / 154		3.50
o (3)	2016	141	76	54%	33	43%	3.35	153		3.68
Computer Science (3)	2017	131	43	38%	22	51%	3.48	155		3.75
	2018 2019	139	50	36%	17	34%	3.57	157	152 153 139 153 151 157 156 155 148 148 155 163 161 163 156 157 156 155 158 155 159 147 156 157 158 780 /164 165 162 162 153 152 151 153 154 163 164 165 165 155 159 162 165 159 162 165 159 162 154 155 156	3.87
		100	35	35%	22	88%	3.10	155		3.80
	2015	119	33	28%	12	36%	3.74	165		4.88
Lliotom	2016	107	26	24%	18	69%	3.79	166		4.88
History	2017	103	28	27%	18 11	64%	3.70	158		4.75
	2018 2019	96 97	17 29	18% 30%		65% 48%	3.60 3.30	164 162		4.75
	2015	122	47	39%	14 14	30%	3.66	154		4.57 3.57
	2015			22%						3.33
Physics	2010	101 105	22 20	19%	6 7	27% 35%	3.65 3.89	157 153		3.40
Filysics	2017	61	20 17	28%	8	47%	3.73	155		3.69
	2019	51	22	43%	8	36%	3.80	157	153 139 153 151 157 156 155 148 148 155 163 161 163 156 157 156 155 158 155 158 155 159 147 156 157 158 780 /164 165 165 162 162 153 152 151 153 154 163 162 165 159 162 155 158 155 159	4.12
		83	14	17%		71%	3.60			
	2015 2016	107	9	8%	10 8	89%	3.64	158 160		4.45 4.25
Psychological	2010	78	9	12%	8	89%	3.76	160		4.25
Sciences	2017	76 116	9 15	13%	9	60%	3.76	161		4.89
	2018	102	8	8%	7	88%	3.40	163		5.07
	2015	51	33	65%	18	55%	3.59	161		4.72
	2015	62	43	69%	19	44%	3.63	160		4.72
Public Policy	2010	75	48	64%	22	46%	3.55	160		4.30
Public Policy	2017	10	+0	U+ /0		TO /0	0.00	100	100	7.10
Fublic Folicy	2018	42	28	67%	10	36%	3.66	159	158	4.43

⁽¹⁾ Average of UG transcripts submitted by enrolled students.

⁽²⁾ Average GRE scores submitted by enrolled students. GRE General Test (tests taken prior to August 1, 2011) scores reported 200–800, in 10-point increments GRE revised General Test (tests taken on or after August 1, 2011) scores reported 130–170, in 1 point increments.

⁽³⁾ This includes students in the Computational Operations Research.

APPENDIX III GRADUATE STUDENT ENROLLMENTS⁽¹⁾

Fall 2015 to Fall 2019

Department	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Fall 2019
American Studies	56	45	45	43	42
Anthropology	38	38	33	37	31
Applied Science	34	34	36	35	29
Biology	20	17	16	23	19
Chemistry	5	9	13	12	9
Computer Science ²	119	107	100	85	79
History	72	55	59	48	48
Physics	91	80	63	56	51
Psychological Sciences	20	20	16	20	17
Public Policy	41	39	38	26	16
TOTALS	496	444	419	385	341

Notes:

¹ Totals include full-time, part-time and continuous enrollment registration, including (7) dual degree students in Law, Business, and Education in 2019.

² Includes Computational Operations Research.

APPENDIX IV GRADUATE STUDENT ENROLLMENT BY DEGREE FALL 2019

Program	MA	MS	MA/PhD	MS/PhD	PhD	MPP	Total
American Studies	6				36		42
Anthropology	3		5		23		31
Applied Science					29		29
Biology		19					19
Chemistry		9					9
Computer Science		2			56		58
COR		21					21
History	10				38		48
Physics					51		51
Psychological Sciences		17					17
Public Policy (MPP)						16	16
	MA	MS	MA/PhD	MS/PhD	PhD	MPP	
Total Enrollment	19	68	5	0	233	16	341

APPENDIX V

GRADUATE DEGREES AWARDED DURING THE LAST 10 YEARS

(August 2010 - May 2020)

DEPARTMENT	PROGRAM	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	SINCE AUG.
DEI ARTIMEITI	INITIATED	10 11	11.12	12 10	10 14	14 10	10 10	10 17	17 10	10 10	10 20	2010
American Studies	1982-MA	9	4	6	7	5	3	3	8	3	2	50
	1988-PhD	4	4	7	6	9	5	11	4	5	5	60
Anthropology	1979-MA	5	6	7	8	3	6	5	2	4	3	49
	2001-PhD	0	0	4	7	2	1	5	7	4	2	32
Applied Science	1970-MA/MS	4	3	4	6	2	2	0	2	7	1	31
	1990-PhD	2	2	8	4	6	2	5	5	3	9	46
Biology	1963-MA/MS	6	11	11	8	7	9	9	7	8	9	85
Chemistry	1964-MA/MS	4	7	6	6	8	4	4	7	7	4	57
Computer Science ¹	1984-MS	18	26	15	23	17	17	30	20	13	17	196
	1986-PhD	3	6	7	6	4	12	8	9	12	10	77
History	1955-MA	22	15	14	12	13	7	16	11	16	12	138
	1967-PhD	3	7	3	2	5	4	9	5	4	3	45
Physics	1959-MA/MS	13	9	13	13	5	7	18	12	6	10	106
	1964-PhD	12	6	5	5	7	9	16	16	14	4	94
Psychological Sciences	1953-MA	4	7	4	8	12	7	8	10	4	0	64
	2019-MS									2	5	7
Public Policy	1991-MPP	19	19	20	19	18	20	18	21	13	13	180
Tabel	MA/MS/MPP	104	107	100	110	90	82	111	100	83	76	963
Totals	PhD	24	25	34	30	33	33	54	46	42	33	354

¹Includes Computational Operations Research.