Committee on Graduate Studies Report to the Faculty. July 2014 - June 2015

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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
- 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 are integral to the mission of William & Mary. 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 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 highly selective graduate programs that are often recognized as being among the most academically rigorous in the nation. For example, our doctoral program in U.S. Colonial History currently is ranked 3rd in the U.S. in the U.S. News & World Report's rankings for Best Graduate Schools. Our master's programs in Psychology and Biology are among the strongest research-focused 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 University* is just as much tied to graduate excellence as it is to our reputation as an undergraduate Liberal Arts institution. Excelling at the graduate level and fostering a strong sense of community among our graduate students and graduate faculty is 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 departments and programs with A&S graduate programs award approximately 40% 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 Learning's list of Research Universities with high research activity (RU/H). In addition, in Fiscal Year 2015, faculty members affiliated with any of the eleven A&S graduate programs generated over two-thirds of the Facilities & Administrative cost recovery on the main campus. These funds are essential for maintaining the research infrastructure for all W&M faculty.

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. As the W&M Promise is implemented, the mentoring and teaching roles assumed by A&S graduate students will increase in both number and importance to help contribute to the success of W&M.

New and Recurring Themes and Issues

Graduate Financial Aid

Graduate student financial support continues to be the most pressing issue for the graduate programs in A&S. Historically, financial aid increases for A&S graduate programs have been dependent on irregular and insufficient allocations from the Commonwealth. W&M's budget has never included an annual cost-of-living increase in A&S graduate stipend levels. Thus, A&S graduate financial aid has neither kept up with increases in the cost of living nor kept up with the aid offered by our peer institutions.

Arts & Sciences is delighted that increases in base funding for graduate stipends are understood as a W&M priority and that in previous years the Office of Graduate Studies and Research enjoyed significant increases in support of the approximately 500 graduate students in A&S. However, the institutions against which W&M competes have been aggressively increasing the amounts of the financial packages they are offering top candidates.

At the May 7, 2015 meeting of the A&S Committee on Graduate Studies, the nine graduate directors in attendance reported on the results of their recruiting efforts for Fall 2015 admissions; Biology and Computer Science provided summaries via email. Success stories included American Studies. Anthropology, and History, doctoral programs that secured most of their top candidates with help from the new recruitment fellowships reported below. Biology reported that the Fall 2015 entering cohort was much stronger on paper than in previous years, thanks in part to the fact that the department was able to recruit their top two candidates using recruitment fellowships. Psychology also reported success, though they lost applicants to their terminal master's program to doctoral programs at other universities. Computer Science and Physics were not as successful, with most of their top candidates (2 out of 3 in Computer Science and 3 out of 3 in Physics) accepting offers from other universities. Chemistry, Computational Operations Research, and Public Policy also reported that they continue to struggle to recruit strong applicants, with this year's recruiting season being even tougher than last year's. Applied Science reported that the success rate of their offers was about average, though the recruitment fellowship they were able to offer to a top applicant was key in securing the applicant's acceptance. While factors in addition to the composition of financial aid packages figured into candidates' decisions, the W&M stipend offers remain uncompetitive, a situation that recruitment fellowships can help ameliorate but do not overcome. In addition to lower stipend offers, A&S also does not provide health insurance or health insurance subsidies to graduate

students.

Stipend increases and the provision of health insurance subsidies are critical in A&S for the following reasons:

- Competitiveness: A&S graduate student stipends have not kept pace with cost of living increases. Several A&S graduate programs have reduced the size of their incoming cohorts in order to increase stipends, and thus currently are at their minimum viable size. In terms of our base stipends for graduate students, we remain behind the majority of our peers; top applicants to all programs are routinely lost to peer institutions offering higher stipends. Our competitiveness is further reduced by the fact that most of the institutions against which we compete for top graduate students offer partial or full subsidies for graduate student health insurance as an additional form of financial aid, whereas W&M does not provide health insurance subsidies to A&S graduate students.
- Diversity: Members of groups traditionally under-represented in academia receive generous financial aid offers from other institutions. Given the present stipends, graduate programs 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 in courses with enrollments of approximately 15,000 undergraduate students annually. In addition, A&S graduate student mentors contribute to the success of undergraduate research in a number of disciplines.
- Faculty retention: In the A&S disciplines that have graduate programs, the graduate faculty cannot maintain their research productivity and their ability to obtain external grant and contract funding at current levels without the participation of highly qualified graduate students.

Dean Torczon, the Committee on Graduate Studies, and the Dean of A&S have taken the following steps to continue advocacy for increases in A&S graduate student support; in addition, the Provost used his discretionary power to direct private money to A&S Graduate Studies and Research, as detailed below:

- 1. The Dean of the Faculty of Arts & Sciences, in collaboration with the Dean of Graduate Studies and Research, has once again submitted a Planning Budget Request asking for further investment in A&S graduate financial aid. Past requests were reviewed favorably and there have been significant investment in graduate financial aid, although more is still needed to bring A&S to a nationally competitive level. In 2014-15, \$185,000 was added to the base financial aid budget for A&S graduate programs; however, there were outstanding commitments not included in the original total that consumed over 80% of the new funds received for FY2015. No increase was received for 2015-2016.
- 2. In consultation with the Dean of the Faculty of Arts & Sciences and the Dean of Graduate Studies and Research, in Fall 2014 the Provost used his discretionary authority to establish the Walter J. Zable Graduate Recruitment Fellowships for the top applicants to doctoral programs in Arts & Sciences, thanks to the generous bequest left by the late Walter J. Zable. In steady-state 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 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. In 2014-2015, six incoming students received Walter J. Zable Graduate Recruitment Fellowships (one in American Studies, one in Applied Science, one in Computer Science, and three in History).
- 3. The Dean of Graduate Studies and Research used the discretionary portion of the base budget increase received in FY2015 to establish the Dean's Recruitment Fellowships to help recruit top applicants to doctoral programs in Arts & Sciences. One fellowship is granted to each of the six doctoral programs to use at their discretion when recruiting. Fellows receive a supplementary stipend of \$4,000 per year for the recipient's first two years in the doctoral program.

4. In Fall 2014, the 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 Dean of Graduate Studies and Research. With matching funding from external funding agencies, departmental resources, and in-kind contributions from the graduate student applicants, a total of fourteen doctoral students received substantive funding that helped make it possible for them to travel to sites in Europe, the Caribbean, Canada, and across the U.S. to pursue their research.

Graduate A&S Recruitment

In the fall of 2014, William & Mary welcomed an impressive group of 126 new A&S graduate students in eleven master's programs and six doctoral programs. The applicant pool, totaling almost 800 in 2014, has increased by 10% over the past four years. More than 65% of the entering A&S graduate students in Fall 2014 had conducted research projects as undergraduate students, with most receiving awards or Honors for their scholarship. More than a quarter had contributed to their communities through volunteer service, and 60% had been teachers or mentors to preschoolers through senior citizens. Approximately 20% of the entering A&S graduate students were international students from six countries.

Graduate Student Research and Conference Travel Funds

In the 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 <u>A&S Graduate Student Research Grants</u> program is to provide funding in support of A&S graduate student research.

As of the fall 2007 semester, continuous enrollment fees from A&S graduate students have provided a stable source of funding for the A&S Graduate Student Research Grant program, enabling this program to be offered predictably each fall and spring semester. To aid graduate students in conducting summer research, the OGSR initiated a summer funding program in Summer 2009. In previous years, spring research grants could include funding for summer activities, but the funds had to be expended prior to July 1, which placed undue constraints on their use. This year the OGSR awarded a totals of \$7,004 to 24 graduate students in Summer 2014, \$5,668 to 20 graduate students in Fall 2014, \$5,390 to 19 graduate students in Spring 2014, and \$5,458 to 20 graduate students Summer of 2015. The maximum award was \$300.

The OGSR and the W&M Student Activities Office provide financial support for the A&S Graduate Student Association (GSA) <u>Supplemental Conference Funding</u>. 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 a substantial unmet need, starting in Spring 2014 the OGSR raised the cap for each type of supplemental conference travel award by \$100; further information can be found on the Conference Funding webpage maintained by the A&S GSA at http://wmpeople.wm.edu/site/page/gsa/conferencefunding. The OGSR provided \$5,100 for 20 awards in Fall 2014, and \$5,400 for 18 awards in Spring 2015.

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:

- <u>Recruitment Fellowships</u>: 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.
- <u>Distinguished Thesis and Dissertation Awards</u>: Established in 2004-2005, these awards recognize
 exemplary achievement in graduate student research. In 2014-2015, four A&S graduates received
 Distinguished Thesis and Distinguished Dissertation Awards.
- Graduate Research Symposium: Board members provide substantive financial sponsorship for the research symposium, as well as serving as active participants.

- Outstanding 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. Two GSAB members sponsored corporate
 awards of \$1000 each to recognize exceptional A&S graduate student research.
- Carl J. Strickwerda Awards for Excellence: Established in in Spring 2011, these awards recognize A&S graduate students for their outstanding written papers on thesis research or scholarship to earn an M.A., M.S., or M.P.P. degree. Master's students submit papers written for the Graduate Research Symposium for consideration by a ranking panel composed of faculty and GSAB members. Three awards were presented at the 2015 Graduate Research Symposium Awards Luncheon to master's students whose papers that 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 presented at the 2015 Graduate Research Symposium Awards Luncheon.
- Commencement reception for graduates from the A&S graduate programs: Established in Spring 2014, this reception, which is fully funded by the GSAB, celebrates graduates, their families, and their faculty during Commencement Weekend. Provost Halleran, Dean Conley, Dean Torczon, and Mike Bracken, representing the Graduate Studies Advisory Aboard, attended the May 2015 event.
- Graduate Student Commons: Opening in Fall 2015, board members sponsored, in collaboration with Carrie Cooper, Dean of University Libraries, the construction of a dedicated study space for all W&M graduate students. Located on the second floor of Swem Library, across from the Center for Geospatial Analysis, the commons will offer space to store research material, study areas, and a place to collaborate with peers. Graduate students will be able to access the space by swiping their W&M ID cards through the card reader at the doors. In addition, the space will occasionally host programs tailored for graduate students. Ed Pease, Adjunct Instructor in Art and Art History, deserves special thanks for creating, pro bono, the design for the wall that was installed to create this new space.

The GSAB closed out FY2015 with 21 community, business, and education leaders as fully participating members. Starting with the October 2014 meeting, two A&S graduate students nominated by the A&S Graduate Student Association joined the board with full voting rights, but no financial obligations. 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 Office of Graduate Studies and Research and the Cohen Career Center to support professional development opportunities for A&S graduate students.

The Graduate Studies Advisory Board met on campus October 19-20, 2014 and again on March 21-22, 2015. The GSAB spring meeting and the Graduate Research Symposium were coordinated to be held on the same weekend. Board participation in symposium events was 100%, including eight board members who served on the judging panel for the awards and eleven board members who chaired oral sessions at the symposium. Members also attended oral and poster sessions and were involved in informal career mentoring and networking at the symposium reception and the awards luncheon. Committee on Graduate Studies members were invited to attend the evening reception at the board's Fall 2014 meetings to discuss their perspectives on the strengths and needs of A&S graduate programs.

Following meetings with Provost Michael Halleran, President Taylor Reveley, and Matthew Lambert, Vice President for University Advancement, board members voted unanimously to increase their membership to

25 (including the two A&S graduate student representatives), to set more aggressive fundraising goals, to take a more active advocacy role on behalf of A&S graduate students, and to continue their efforts to provide career and professional mentorship to A&S graduate students.

In this vein, Execute Committee members approved a request from Dean Torczon that the board sponsor prizes for participation by A&S graduate students and graduate faculty during the 2015 One Tribe, One Day event held on April 21. Four prizes of \$200 each were awarded. An unprecedented 48% of currently enrolled graduate students in A&S gave gifts to the fund of their choice, ranging in amounts from \$1 to \$100. An equally unprecedented 50% of faculty affiliated with A&S graduate programs also gave contributions on that day. In addition, multiple graduate administrators, as well as the spouses of graduate students, graduate faculty, and graduate administrators, gave gifts on behalf of A&S graduate programs. Dean Torczon is grateful to the Graduate Student Association, graduate student leadership within the graduate programs, faculty on the Committee and Graduate Studies, and the chairs and directors of departments and programs, for this resounding affirmation of their commitment to graduate studies in Arts & Sciences.

COGS Highlights

Members of the Arts & Sciences Committee on Graduate Studies met six times during Fall 2014, seven times during Spring 2015 (an eighth meeting had to be canceled due to snow), and on May 27, 2015 for their second May Seminar. A summary of highlights from these meetings includes:

- Following the first-ever COGS May Seminar in May of 2014, Steve Otto, Director of Communications, and Kathy Larrieu, Web Specialist, for A&S met with COGS members to continue the process of slimming down the new online Graduate Arts and Sciences catalog to focus on regulations and requirements, while moving recruitment, admissions, and other such information to either OGSR or graduate program websites, as appropriate. The OGSR and the A&S graduate programs extend special thanks to Kathy for her considerable contributions to this effort, which culminated in a final vote of approval of the changes at the COGS May Seminar in May of 2015.
- Also following the May 2014 Seminar, COGS members continued what turned into a year-long discussion of what it means to do research at the graduate level. This led to considering the varying kinds of research in which graduate students engage, which led in turn to discussions regarding how such research should be evaluated and how many credit hours of each kind of research identified should be used to satisfy degree requirements for each type of graduate degree awarded by A&S. This interesting philosophical discussion culminated in the creation of several new research courses, with numbers common to all the graduate programs, as well as a complete rewrite of the A&S requirements for earning Degrees of Masters of Art and Masters of Science. Of particular note, the number of credit hours required to earn a thesis master's degree was raised from 24 to 30, to conform with national standards, with the requirement that six of those credit hours must be earned in 700, Thesis.
- Another consequence of this year-long discussion was that the definition of <u>Research Graduate</u>
 <u>Student</u> was reviewed and revised to make more precise the expectations for graduate students moving from coursework to full engagement in research.
- The Graduate Arts & Sciences Catalog also was revised to create a uniform start date of the time-to-degree clock for students admitted either to MA/PhD, MS/PhD, or PhD programs. Specifically: 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 and 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.
- COGS member graciously agreed to surrender the COLL prefix that long had been used for zerocredit courses offered to A&S graduate students through the A&S Graduate Center for use in support of the new undergraduate general education College (COLL) curriculum. Starting with the

- 2015-2016 academic year, GRAD will be used to designate courses offered by the A&S Graduate Center.
- COGS members approved a petition to allow A&S graduate students to repeat a course when they
 receive a grade of C+ or lower. Working with Sallie Marchello, University Registrar, new wording
 was introduced in the 2015-2016 Graduate Arts & Sciences catalog to cover <u>Grading and</u>
 <u>Repeated Courses</u>.
- COGS members engaged in further discussions with the University Archivist and other key
 members of the Swem Library staff to plan the move to the electronic submission, filing, and
 dissemination of theses and dissertations (ETDs) by Arts & Sciences students using the ProQuest
 ETD Administrator platform.
- Finally, COGS members agreed to a submission to the Charles Center May Seminar Call for Proposals in support of a follow-up review of the many substantive changes made to the Graduate Arts & Sciences catalog over the previous year.

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

Course Approvals and Revised Degree Requirements

Applied Science

The following changes were approved by COGS on March 19, 2015.

COURSE REQUIREMENTS

The student and his or her advisory committee will plan a coherent degree program, including required coursework that best suits the student's educational goals and previous training. For most students this coursework will include the department's core sequence APSC 603 - Introduction to Scientific Research I, APSC 604 - Introduction to Scientific Research II, and APSC 607 - Mathematical and Computational Methods I, as well as one of these: APSC 608 - Mathematical and Computational Methods II, APSC 651 - Cellular Biophysics and Modeling, APSC 755 - Nonlinear Dynamics or MSCI 648 - An Introduction to Mathematical Biology. Due to the different backgrounds, previous preparation, and career goals, not all Applied Science students will take the full core sequence, and a substitution for any of these courses can be approved by the Academic Progress committee in Applied Science. However, unless otherwise exempted by the department, students will be responsible for the material covered in the entire core.

Computational Operations Research

The following changes were approved by COGS on May 7, 2015.

COURSE NAME AND DESCRIPTION CHANGES:

MATH 501551 - Probability

Fall and Spring 3 Prerequisite(s): Consent of instructor.

Topics include: combinational analysis, discrete and continuous probability distributions and characteristics of distributions, sampling distributions.

Computer Science

The following changes were approved by COGS on September 18, 2014.

COURSE ADDITION:

CSCI 627: Fundamentals of Computer Graphics.

Fall or Spring (3), Peers.

Prerequisites: Linear Algebra, Algorithms, or consent of the instructor

Course Description:

Introductory and advanced computer graphics topics and applications. This course covers both projection-based and ray-based image synthesis. In addition, this course will also explore advanced Monte Carlo based methods for solving the radiative transport equation, and advanced surface reflectance and subsurface reflectance models for photorealistic image synthesis.

The following changes were approved by COGS on April 30, 2015.

COURSE DELETIONS:

CSCI 521: Implementation of Database System

CSCI 643: Automated Logic Reasoning

Chemistry

The following changes were approved by COGS on April 30, 2015.

COURSE NAME AND DESCRIPTION CHANGES:

CHEM 501601, Advanced Inorganic Chemistry

<u>History</u>

The following changes were approved by COGS on April 2, 2015.

The History Program

For nearly a century, the Lyon G. Tyler Department of History has been offering students a unique opportunity to pursue graduate degrees. Its moderate size, prize-winning faculty, and distinctive history helps the Department create an innovative learning environment that fosters close interaction among students and professors. The Program prides itself on its commitment to preparing broadly trained scholars and teachers who are leaders in their fields of specialty, while also readying interested students for careers as editors, historical archaeologists, and public history professionals in historical societies, libraries and museums. Our accomplished faculty specialize in Early America, the United States, the Atlantic World, Africa, Latin America and the Caribbean, Europe, the Middle East, East and South Asia, and the Indian Ocean. The History Department offers Doctoral and Master's degree programs. The Program's excellent placement record is testament to its success. www.wm.edu/as/history/gradprogram/placement/index.php.

Graduate students also benefit from the Department's close association with the American Studies and Anthropology Programs, the Omohundro Institute for Early American History and Culture, the National Institute for Early American History and Democracy, the Colonial Williamsburg Foundation, the Wendy and Emery Reves Center for International Studies, Swem Library, and the Center for Archaeological Research, among many other local historical institutions of national importance.

The program usually enrolls just ten new Master's students and six doctoral students each year, which allows the faculty to devote time to each student. Talented students with a wide range of interests come from all over the United States, and from countries such as Canada, France, Great Britain, the People's Republic of China, and the Czech Republic.

In addition to traditional preparation in research, the Lyon G. Tyler Department of History offers both MA and doctoral students practical experience in career fields related to history in the form of apprenticeships and internships in conjunction with the Omohundro Institute of Early American History and Culture, Colonial Williamsburg, the Earl Gregg Swem Library, the National Institute of American History and Democracy, the Lemon Project in African American history, and the William and Emery Reves Center for International Studies. Apprenticeships commence on July 1, August 1, or late August of each year and extend to May 15 or June 30 of the succeeding year. The History Department also requires doctoral students to participate in a teaching internship that provides supervised experience in teaching college classes.

Please also see the faculty directory, the biographies of current students, and our placement page.

General Description

The History Department offers a Doctoral Program and a Masters program.

The William and Mary doctoral program combines a broad approach to history and close attention to our students. In their first year students will take a core course in method and theory, research seminars, and thematic as well as regionally-based reading seminars. Students will also prepare a research portfolio consisting of two major research papers. Students will then receive their M.A. degrees and take another year of topical reading seminars. In the fall semester of their third year, doctoral students take a written and oral comprehensive qualifying examination in four fields. Students will receive instruction in teaching techniques, have the opportunity to serve as

Teaching Assistants and to teach their own course under the supervision of faculty. Ph.D. students receive full funding (tuition fees and stipend) for six years.

The department also offers a small and intensive one-year terminal Master's Degree Program. Students will take two semesters of coursework, including an introduction to historiography and historical method, research seminars, and thematic as well as regionally-based reading seminars. Students will also prepare a research portfolio consisting of two major research papers. Applicants to the MA program may apply for apprenticeships in archives and manuscript collections, editing scholarly books and *William and Mary Quarterly* articles, and humanities computing. Students chosen to serve as apprentices receive a stipend of \$4,000.

About half the graduates of the MA program in History at William & Mary have gone on to doctoral programs. The others include secondary school teachers, editors, archaeologists, and museum and library professionals. For more information on the placement of graduates, see the Placement Directory.

Part-time students are not eligible for financial support.

All Ph.D. and M.A. Students must pass a language exam (pdf) that tests reading knowledge of a language other than English.

(See general College requirements in the section entitled 'Graduate Regulations' in this catalog.)

Admission

A required supplemental application is available on the department's web page at www.wm.edu/history. Applicants must submit official undergraduate transcripts, three letters of recommendation, and official copies of scores from the Graduate Record Examination. A writing sample is required. A separate application is not necessary for financial aid. For full consideration, completed applications must be postmarked by December 5, 2013 for the Masters and Ph.D. programs. Minimum requirements for admission include an overall academic average of 3.0 on a 4.0 scale and the completion of 24 semester hours of work in history. Additional hours in history and course work in a foreign or classical language are highly recommended.

Programs and Course Descriptions Description of Courses

Courses listed in this catalog are not offered every academic year.

Unless otherwise noted, all courses are graded using standard grading [A, B, C, D, F] scheme (See Grading and Academic Progress in the section entitled 'Graduate Regulations') and may not be repeated for credit (See Repeated Courses requirements in the section entitled 'Graduate Regulations').

Programs

• History, MA

(See general College requirements in 'Graduate Regulations'.)

Candidates admitted to the M.A. Program as full-time students must be in full-time residence for at least two semesters and must complete all degree requirements by March 31 of the following year. Those admitted as part-time students must complete all degree requirements within three years of starting the program. All masters students must complete 24 credit hours of coursework, not including credits for HIST 700. These 24 credit hours will include:

- HIST 701 History and Literature of History (3 credits)
- Two research seminars (History 710) (total of 6 credits)
- Three readings seminars (History 715) (total of 9 credits)
- HIST 695 Directed Research (total of six credits)

Students must achieve a grade point average of at least 3.0 on a 4.0 scale. Candidates must demonstrate by departmental examination a reading knowledge of a foreign or classical language in which there is a significant historical literature; and must submit a research portfolio approved by a committee.

- · History, PhD
- (See general College requirements in 'Graduate Regulations'.)

• Two years of coursework are required for the Doctor of Philosophy degree. Doctoral students must complete all requirements for the Master of Arts degree, including the language requirement, the research portfolio, and all course work, by March 15 of their second year in residence. In addition, candidates for the Ph.D. degree must complete at least 28 hours of graduate coursework in History (not including HIST 800) beyond the masters level. They also must pass a language exam. In the fall of the third year of graduate study, doctoral students must take a written and an oral comprehensive qualifying examination in four fields. To qualify to take the comprehensive examinations, students must have completed all coursework and any outstanding requirements by the end of the previous semester. See the History Department's graduate regulations for details.

Courses

See updated course schedule at:

https://banweb.wm.edu/pls/PROD/bwckschd.p_disp_dyn_sched History

HIST 501 – Independent Study in History

Fall (3) Staff.

An independent study course that may be repeated for credit as long as there is no duplication of material.

HIST 590 – Topics in History

Fall and Spring (3,3) Staff.

Topics change each year. Please consult the website www.wm.edu/history and the department office for the current listing of topics offered. *This course may be repeated for credit if there is no duplication of topic.*

HIST 695- Directed Research

Fall and Spring (3, 3) Staff. Prerequisite(s): Instructor's permission required.

This course may be repeated for credit.

HIST 700 - Thesis

Fall and Spring (3, 3) Staff

Research and writing for Research Portfolio. This course may be repeated for credit.

HIST 701 – Historian's Craft

Fall (3) Staff

This seminar will serve as an introduction to historical method and theory. Students will read works by influential historians and learn about major schools of historical thought. The course will address issues such as the relationship between history and other disciplines, the challenges and strengths of different historical methodologies, and the political and cultural contexts in which various approaches to history have developed. This course is required for all entering graduate students.

HIST 705 - Teaching History

Spring (1) staff. Graded Pass/Fail.

An exploration of the variety of teaching philosophies, techniques, and outcomes in higher education, taught by the faculties of History and American Studies. Required of all doctoral students who wish to serve as teaching fellows, but open to all degree candidates in those fields.

HIST 706 – Dissertation Proposal Writing Class

Spring (3) staff

This course is required for all third-year Ph.D. students. Students will draft and workshop their dissertation proposals.

HIST 710 - Research Seminars (topics change each semester; see course schedule)

Fall and Spring (3, 3) staff.

Topical seminars in which students will research and write a major paper, to be included in their M.A. research portfolio.

HIST 715 - Readings Seminars (topics change each semester; see course schedule)

Fall and Spring (3, 3) staff

Topics change each semester

HIST 800 - Dissertation Fall and Spring (1) Staff

Research and writing of doctoral dissertation. This course may be repeated for credit.

Public Policy

The following changes were approved by COGS on November 20, 2014

COURSE ADDITION:

653. Diplomacy Lab.

Fall/Spring Variable Credit, 1 to 3 credits Staff.

Course for students accepted into the State Department's Diplomacy Lab program. Separate sections will be offered for each of the Diplomacy Lab projects. Instructor permission required.

DEGREE REQUIREMENTS:

Degree Requirements for the Degree of Master of Public Policy

(See general College requirements in the section entitled 'Graduate Regulations'.)

The master of public policy (M.P.P.) degree program is a two-year, full-time, residential program requiring forty-nine hours of course credit. Students accepted for the degrees of MPP/JD, MPP/MBA, MPP/MEd, MPP EdD, MPP/PhD, MPP/MS in Marine Science, MPP/PhD in Marine Science, or MPP/MS in Computational Operations Research are required to have thirty-seven hours of MPP course credit.

The following core courses are required:

PUBP 500 - Mathematics for Public Policy Analysis 1

PUBP 590 - Policy in Practice 1

PUBP 601 - The Political Environment 3

PUBP 602 - Quantitative Methods I 3

PUBP 603 - Quantitative Methods II 3

PUBP 604 - Microeconomics of Public Policy 3

PUBP 606 - Benefit-Cost Analysis 3

PUBP 607 - Law and Public Policy 3

PUBP 609 - Ethics and Public Policy 3

PUBP 610 - Policy Research Seminar 3

PUBP 612 - Public Management and Organizational Behavior 3

Internship:

Students are required to complete an internship (at least 10 weeks of full-time employment) in the summer after their first year of the program.

Additional Requirements:

In addition to the core, students in the MPP degree program are required to take 20 credit hours of electives, including a minimum of five four 3-credit electives, and at least one of which must be a 3-credit or two 2-credit program approved School of Law course(s). Students accepted for the degrees of MPP/JD, MPP/MBA, MPP/MEd, MPP/EdD, MPP/PhD, MPP/MS in Marine Science, MPP/PhD in Marine Science, or MPP/MS in Computational Operations Research are required to take a minimum of 9 8* credit hours of electives, at least one of which must be to include either a 3-credit program or two 2-credit approved School of Law course(s). Law courses are second year electives. Students may pursue one of the suggested areas of emphasis below or an alternative set of courses developed with consent of the Director. Students must petition the curriculum committee for approval of alternative electives. Areas of emphasis include education policy, environmental policy, health care policy, international trade, regulatory policy, and state and local policy.

*this change is a typo left over from the addition of PUBP 590...total credits for the joint degree students remained at 37 when we added this additional 1-credit course, which required closer editing to other parts ...that this number needed to go from 9-8.

Graduate Regulations

The following changes were approved by COGS on October 23, 2014.

COURSE NAME AND DESCRIPTION CHANGES:

COLL prefix universally changed to GRAD

COLLGRAD 501 - English Conversation & Pronunciation (0 credit)

COLLGRAD 503 - Listening, Speaking & Pronunciation Skills (0 credit)

COLLGRAD 505 - Oral Presentation Skills (0 credit)

COLLGRAD 530 - Dissertation Writing (0 credit)

COLLGRAD 550 - College Teaching (0 credits)

The following changes were approved by COGS on May 27, 2015.

The following course additions were approved for all 11 graduate programs.

COURSE ADDITIONS:

666 - Directed Studies

Fall and Spring variable 3-12 credits Graded Pass/Fail

No credits earned in this course may be applied to the number of credits required to satisfy graduate degree requirements. *This course may be repeated.*

693 - Introduction to Graduate Research

Fall and Spring variable 3 or 6 credits

This course introduces students to graduate research. Students design and conduct research with a faculty advisor. This course may be repeated once, only for 3 semester credit hours, and only if no more than 3 semester credit hours have been earned already for 693.

694 - Directed Research Topics

Fall and Spring variable 3-12 credits

Students design and conduct research on a relevant topic with a faculty advisor. This course may be repeated, but no more than 12 semester credit hours may be used to satisfy degree requirements. Students who are submitting a master's thesis may not use this course to satisfy degree requirements.

695 - Directed Thesis Master's Research

Fall and Spring variable 3-9 credits Graded Pass/Fail

Students design and conduct research in support of their master's thesis under the direction of a faculty advisor. This course may be repeated, but no more than 9 semester credit hours may be used to satisfy degree requirements for a student submitting a master's thesis. Students who are not submitting a master's thesis may not use this course to satisfy degree requirements.

700 - Thesis

Fall and Spring variable 3-12 credits Graded Pass/Fail

Students finish the research for and the writing of their master's thesis under the direction of a faculty advisor. This course may be repeated, but no more than 6 semester credit hours may be used to satisfy degree requirements for a student submitting a master's thesis. Students who are not submitting a master's thesis may not use this course to satisfy degree requirements.

795 - Directed Dissertation Research

Fall and Spring variable 3-12 credits Graded Pass/Fail

Students design and conduct research in support of their dissertation under the direction of a faculty advisor. This course may be repeated, but no more than 12 semester credit hours may be used to satisfy degree requirements for a student submitting a dissertation. Students who are not submitting a dissertation may not use this course to satisfy degree requirements.

800 - Dissertation

Fall and Spring variable 3-12 credits Graded Pass/Fail

Students finish the research for and the writing of their dissertation under the direction of a faculty advisor. This course may be repeated, but no more than 6 semester credit hours may be used to satisfy degree requirements for a student submitting a dissertation. Students who are not submitting a dissertation may not use this course to satisfy degree requirements.

RESEARCH GRADUATE STUDENTS:

Upon the recommendation of a student's department/program and approval of the Dean of Graduate Studies and Research, a student's eligibility for Research Graduate status can be established if the following conditions are met:

- The student has successfully completed all course work, excluding the required semester credit hours of 700, Thesis, or 800, Dissertation, necessary to satisfy the requirements for their degree and their degree program, while sustaining a minimum cumulative grade point average of 3.0 on a 4.0 scale.
- The student is not employed significantly in any activity other than research and writing in fulfillment of degree requirements.
- The student is present on the campus or is engaged in approved field work.

While classified as a Research Graduate, a student should register for 12 credit hours per semester or 6 credit hours in the summer of either the Directed Studies, Thesis, or Dissertation course for which payment of the part time rate of one credit hour is required. Research Graduate students may take courses other than Directed Studies, Thesis, or Dissertation, but only if payment for additional tuition has been made. However, if a student takes any additional courses while classified as a Research Graduate, the additional courses taken while classified as a Research Graduate cannot be sued to fulfill degree requirements.

A Research Graduate student is not eligible for services that are paid for by fees (e.g., student health, and recreational center) unless the fee is paid.

GRADING AND REPEATED COURSES:

A student who receives a grade of C+ (2.3) or lower in a course may repeat that course one time for credit, upon approval of both the instructor of the course and the graduate director for the student's program. When such a repeat attempt is approved, the grades for both attempts will count in the cumulative GPA, but on the most recent attempt will count toward the degree.

DEGREE REQUIREMENTS

Master's Degree Requirements

I. Degrees of Master of Arts and Master of Science

In addition to the following general requirements that must be satisfied by students earning either a Master of Arts or a Master of Science degree from the College of Arts & Sciences, special degree requirements (e.g., language proficiency or residency requirements) specific to each of the master's programs are listed under the Graduate Arts & Sciences Catalog entries for departments and programs. Students are required to satisfy all program-specific requirements in addition to the following general requirements.

A. All candidates for the degrees of Master of Arts or Master of Science

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).

All requirements for the master's degree must be completed within six 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-year limit must be filed following the procedures outlined in Time Limits for Degrees and Extensions in the Graduate Arts & Sciences Catalog.

B. Students not submitting a thesis to satisfy degree requirements

Students **not** submitting a thesis must successfully complete 32 semester hours of graduate credit, subject to the following requirements.

- At least 20 semester hours must be earned in courses numbered 600 or above.
- Semester credit earned for 566, 666, 695, 700, 766, 795, and 800 may not be used to satisfy this requirement.
- No more than a total of 12 semester credit hours earned in 694 may be used to satisfy this requirement.

C. Students submitting a thesis to satisfy degree requirements

Students submitting a thesis must successfully complete 30 semester hours of graduate credit, subject to the following requirements.

- At least 12 must be earned in courses numbered 600 or above, excluding 700 (Thesis).
- At least 6 credits must be earned in 700 (Thesis), but no more than 6 semester credit
 hours can be used to satisfy the requirement of 30 semester hours of graduate credit.
- Semester credit earned for 566, 666, 694, 766, and 800 may not be used to satisfy this requirement.
- No more than a total of 12 semester credit hours earned in 693 and 695 may be used to satisfy this requirement.

Some master's programs in the College of Arts & Sciences require a student earning a thesis master's degree to take a comprehensive or qualifying examination to demonstrate competence in his or her field of study. If so, students submitting a thesis must pass the comprehensive or qualifying examination to satisfy this requirement for their degree program.

- The comprehensive or qualifying examination may be either written or oral, at the discretion of the student's graduate program.
- The student must be physically present for the comprehensive or qualifying examination.

Students submitting a thesis must present work that is based on original research that constitutes a contribution to scholarly knowledge.

- The Dean of Graduate Studies and Research will appoint a thesis examination committee for each student
- The thesis examination committee must consist of at least three members, at least two

of whom must be full-time faculty with appointments in the College of Arts & Sciences and must have a formal affiliation with the student's graduate program.

- The student's graduate program recommends the names of members to serve on this
 examination committee. Final approval of the committee rests with the Dean of Graduate
 Studies and Research, and must be secured in advance of the thesis examination.
- If the student's graduate program requires a public defense of the thesis, the first preference is for all thesis examination committee members to be physically present for the examination.
 - However, electronic participation by the thesis examination committee members is allowed to accommodate schedules, particularly those of committee members who do not hold appointments at William & Mary.
- The student must be physically present for the thesis examination.
- Every member of the student's thesis examination committee must approve the thesis.

A student submitting a thesis to fulfill degree requirements must give three copies in final form to the Dean of Graduate Studies and Research for acceptance or rejection by no later than the deadline published in the <u>A&S: Academic Calendar</u> for the academic semester in which the student intends to graduate.

• The degree will not be granted until all three copies have been submitted to, and accepted by, the Dean of Graduate Studies and Research.

Doctoral Degree Requirements

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.

Elimination of subsection H from the section Requirements for Degrees: Degree of Doctor of Philosophy. All requirements for the degree must be completed within a maximum period of seven (7) calendar years after starting the doctoral program. See the individual department/program description for details on when a student is considered to have started the seven-year Ph.D. clock. Requests for extension beyond the seven-year limit must be filed following the procedures outlined in 'Time Limits for Degrees and Extensions.'

ADMISSIONS

COGS approved centralized wording regarding admission deadlines. *Applications submitted after the program's deadline may be evaluated if space is available.*

Graduate Center Annual Report 2014

Staff and Facilities

The Graduate Center organizes and sponsors a variety of activities, events, and non-credit courses for W&M graduate and professional students. Virginia Torczon, Dean of Graduate Studies and Research, Arts & Sciences, along with Chasity Roberts, Assistant to the Dean of Graduate Studies and Research, administer the Center, which resides in Stetson House at 232 Jamestown Road.

In the Fall 2014 and Spring 2015, three W&M faculty and staff members taught six 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 and professional students, as well as W&M undergraduate students when appropriate.

Graduate Center Highlights

Appendix I provides a listing and summary of participation in Graduate Center activities, events, and courses since fall 2010. Highlights from the spreadsheet include:

- Total course enrollment for the calendar year was 46. The students enrolled were a mix of domestic and international graduate students from A&S, Business, and Education.
- Prior to the 2015 Graduate Research Symposium, the Graduate Center sponsored a workshop lead Barbara Monteith, ESOL Program Manager, on designing conference posters, with an offer to workshop participants to receive individualized feedback on poster layout and design.
- A&S graduate students on the 2015 Graduate Research Symposium Committee and the Graduate Student Association worked with the Office of Graduate Studies and Research and the Graduate Center. The 2015 Graduate Research Symposium was highly productive, with 170 oral and poster presentations and a total of more than 1300 attendees at symposium events. The presenters included 43 graduate students from 17 regional institutions such as American University, Hofstra, Vanderbilt and Virginia Tech. Based on written papers that were submitted by presenters and ranked by a judging panel of A&S faculty and Graduate Studies Advisory Board members, awards totaling \$7,500 were provided to W&M graduate students and visiting student scholars. David Armstrong moderated a panel discussion on "Strong Artificial Intelligence: An Interdisciplinary Panel Discussion on 'Future' Technology. Panel members included a faculty member from Applied Science, the Law School, two Advisory Board members and a current MA/PhD graduate student. The Graduate Studies Advisory Board was a symposium sponsor in 2015 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 corporate awards each year of \$1000 each as well as corporate sponsorship for the symposium.
- On October 5, 2014, an audience of approximately 575 undergraduate and graduate students, faculty, and community members attended the popular annual *Raft Debate*, sponsored by the Office of Graduate Studies and Research, the Graduate Center, and the A&S Graduate Student Association. Given the popularity of the event, with the number of those wishing to attend the event in 2013 greatly exceeding the capacity of the Commonwealth Auditorium, in 2014 the *Raft Debate* was moved to Phi Beta Kappa Hall so all those who wished to attend would be able to do so. The *Raft Debate* numbers among the William & Mary Traditions featured on the William & Mary webpage https://www.wm.edu/about/history/traditions/index.php.

Newsletter

The Graduate Center's electronic newsletter *DID YOU KNOW THAT?* (*DYKT?*) is distributed by e-mail to A&S graduate students every Monday during the academic year. Each academic year there are approximately thirty issues of *DYKT?* Starting in Fall 2008, all editions of *DYKT?* have been posted online at http://www.wm.edu/as/graduate/studentresources/newsletter/index.php.

March 31, 2014 witnessed the debut of a new electronic version of **DYKT?** with condensed entries that include links to Events posted in the also-new A&S Graduate Studies & Research Events Calendar posted on the Graduate Studies & Research homepage (see http://www.wm.edu/as/graduate/index.php), as well as to webpages containing more pertinent information. The revised format, which makes it easier to scan the highlights while still allowing readers to pursue more information regarding the announcements of particular interest, has been met with great enthusiasm.

A&S Graduate Ombudsperson Report for July 2014-June 2015

Peter Vishton, Associate Professor, Department of Psychology, vishton@wm.edu

A total of 11 graduate students contacted the ombudsperson for consultation.

A wide range of issues arose over the course of the year, including student-advisor conflicts over lab access and progress toward degree completion, student collegial conflicts, negotiating a back-dated transcript change for a student who was asked to drop a class by a professor, and problems with the payroll office. For one case, I lent my services to VIMS for a grade change dispute.

The time-scale of meetings varied widely. The shortest cases were resolved through a meeting and set of e-mails exchanged within a few days. The longest case required an extensive set of conversations and interactions with three professors, a director of graduate studies, and the College legal staff.

All cases have been resolved.

Committee on Graduate Studies Members, 2014-15

Virginia Torczon, Chair
Arthur Knight (Fall)/Alan Braddock (Spring), American Studies
Martin Gallivan, Anthropology
Leah Shaw, Applied Science
Matthew Wawersik, Biology
Debbie Bebout, Chemistry
Evgenia Smirni, Computer Science
Rex Kincaid, Computational Operations Research
Hiroshi Kitamura (Fall)/Katherine Levitan (Spring), History
David Armstrong, Physics
Pam Hunt, Psychology
Elaine McBeth, Public Policy

APPENDICES

APPENDIX I

GRADUATE CENTER PARTICIPATION Fall 2010 thru Spring 2015

Course	F 2010	S 2011	F 2011	S 2012	F 2012	S 2013	F 2013	S 2014	F 2014	S 2015
COLL 501 001	10		13		15		6		14	
COLL 501 002	8		8		9					
COLL 503 001		14		7		10	10	9		
COLL 503 002				14		15				
COLL 505 001	15		16		15		10	9	5	8
COLL 505 002										10
COLL 520 001		5		12		16				
COLL 525	10		11				14			
COLL 530		4		4	9	5		12	7	2
COLL 550		16						8		
Course Subtotals	43	39	48	37	48	46	40	38	26	20
Workshops	F 2010	S 2011	F 2011	S 2012	F 2012	S 2013	F 2013	S 2014	F 2014	S 2015
Poster Workshop - Research Symposium		5				16		10		
Presenting Yourself Workshop		9	8	7		6				
Workshop Subtotals	0	14	8	7	0	22	0	10	0	0
Programs	F 2010	S 2011	F 2011	S 2012	F 2012	S 2013	F 2013	S 2014	F 2014	S 2015
Conversation Partners	47	48	60	39	52		60			
Graduate Research Symposium		1100		1100		1300		1300		1100
Raft Debate	400		425		575		575		600	
Program Subtotals	447	1148	485	1139	627	1300	635	1300	600	1100
Social Events	F 2010	S 2011	F 2011	S 2012	F 2012	S 2013	F 2013	S 2014	F 2014	S 2015
Meet and Greet	16		18		18		26			
Int'l Thanksgiving	77		75		60		75			
CPP Appreciation		8		9				19		
Social Event Subtotals	93	8	93	9	78	0	101	19	0	0
GRAND TOTAL	583	1209	634	1192	753	1368	776	1367	626	1120

APPENDIX II

Applied, Accepted and Enrolled Fall 2010 - Fall 2014

			Acce	epted	Enre	olled	Avg UG ⁽¹⁾	Av	g GRE Scores	s ^(1,2)
		Applied	Total	Rate	Total	Rate	GPA	Verbal	Math	Writing
	2010	101	23	23%	9	39%	3.74	603	621	5
A	2011	90	21	23%	7	33%	3.67	600	637	4.56
American Studies	2012	75	27	36%	12	44%	3.54	651 / 163	654 / 148	4.50
Studies	2013	53	17	32%	5	29%	3.76	600 /165	587 / 150	4.91
	2014	59	17	29%	7	41%	3.71	163	150	4.58
	2010	77	16	21%	10	63%	3.64	595	621	5.00
	2011	70	14	20%	7	50%	3.47	514	600	4.19
Anthropology	2012	72	14	19%	5	36%	3.44	520 / 160	690 / 149	4.70
	2013	73	26	36%	13	50%	3.52	570 / 160	640 / 153	4.25
	2014	59	15	25%	5	33%	3.41	161	154	4.83
	2010	50	13	26%	9	69%	3.57	502	744	3.55
Applied	2011	38	10	26%	7	70%	3.32	527	724	3.86
Science	2012	40	18	45%	8	44%	2.99	476 / 146	778 / 157	3.75
	2013	34	8	24%	5	63%	3.30	157	158	4.00
	2014	40	13	33%	7	54%	3.04	149	155	3.10
	2010	48	15	31%	9	60%	3.42	607	681	4.28
D: 1	2011	41	11	27%	6	55%	3.52	567	672	4.08
Biology	2012	40	12	30%	10	83%	3.50	497 / 158	587 / 156	4.27
	2013	31	14	45%	8	57%	3.46	158	156	3.61
	2014	65	22	34%	9	43%	3.59	158	157	4.40
	2010	18	8	44%	7	88%	3.39	493	566	3.85
Chamietry	2011 2012	18 23	7	39%	7	100% 67%	3.11	533 470 / 160	705 790 / 159	3.20
Chemistry	2012	23 18	6 8	26% 44%	4 6	75%	3.79 3.50	156	159	4.30 3.83
	2013	19	3	16%	2	67%	3.48	159	159	4.50
	2014	97	42	43%	27	64%	3.40	524	738	3.85
	2011	120	61	51%	31	51%	3.38	521	751	3.59
Computer	2012	118	70	59%	30	43%	3.35	534 / 156	763 / 161	3.76
Science (3)	2013	118	72	61%	20	28%	3.32	420 / 155	795 / 153	3.48
	2014	118	64	54%	32	50%	3.47	153	165	3.46
	2010	151	35	23%	16	46%	3.82	609	632	5.19
	2011	155	27	17%	17	63%	3.73	641	644	4.76
History	2012	152	24	16%	13	54%	3.73	685 / 166	648 / 151	4.73
	2013	129	24	19%	12	50%	3.64	152	152	4.35
	2014	122	19	16%	12	63%	3.74	166	153	4.86
	2010	139	29	21%	8	28%	3.65	540	771	4.13
	2011	125	32	26%	14	44%	3.59	469	763	3.43
Physics	2012	108	41	38%	15	37%	3.50	504 / 159	784 / 161	4.09
	2013	96	45	47%	8	18%	3.65	155	160	3.94
	2014	112	49	44%	16	33%	3.54	154	163	3.57
	2010	79	10	13%	6	60%	3.81	603	673	4.83
	2011	94	13	14%	9	69%	3.68	594	679	4.78
Psychology	2012	133	11	1%	8	73%	3.75	625 / 163	710 / 155	4.78
	2013	96	10	10%	9	90%	3.63	162	159	4.56
	2014	112	9	8%	8	85%	3.60	158	155	4.45
	2010	97	43	44%	21	49%	3.55	589	683	4.41
Duting D. P.	2011	88	42	48%	22	52%	3.50	607	687	4.55
Public Policy	2012	98	51	52%	20	39%	3.55	637 / 160	699 / 155	4.58
	2013	86	56	65%	21	38%	3.62	160	149	4.20
	2014	65	37	57%	20	54%	3.60	160	155	4.70

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

⁽²⁾ 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 program.

APPENDIX III GRADUATE STUDENT ENROLLMENTS⁽¹⁾

Fall 2010 to Fall 2014

Department	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014
American Studies	75	74	75	64	57
Anthropology	47	49	48	44	41
Applied Science	35	36	38	37	36
Biology	29	22	24	24	18
Chemistry	13	13	11	10	8
Computer Science ²	80	93	97	104	107
History	92	94	79	71	66
Physics	65	66	74	73	86
Psychology	15	17	18	21	19
PsyD ³	18	1	0	0	0
Public Policy	42	43	43	44	45
TOTALS	511	508	507	492	483

Notes:

¹ Totals include full-time, part-time and continuous enrollment registration, including dual degree students in Law, Business and Marine Science (9 dual degree students in 2014).

² Includes Computational Operations Research.

³ Fall 2010-2014 enrollment reflects only students enrolled through W&M and does not include total consortium count.

APPENDIX IV
GRADUATE STUDENT ENROLLMENT BY DEGREE FALL 2014

Program	MA	MS	MA/PhD	MS/PhD	PhD	MPP	Total
American Studies	7		6		44		57
Anthropology	13		4		24		41
Applied Science				2	34		36
Biology		18					18
Chemistry		8					8
Computer Science		13		10	63		86
COR		21					21
History	19		11		36		66
Physics				5	81		86
Psychology	19						19
Public Policy (MPP)						45	45

	MA	MS	MA/PhD MS/PhD	PhD	MPP	
Total Enrollment	58	60	21 17	282	45	483

APPENDIX V

GRADUATE DEGREES AWARDED DURING THE LAST 10 YEARS (August 2005 – May 2015)

					(, ,agaet		ay	- /				
DEPARTMENT	PROGRAM INITIATED	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	SINCE AUG. 2005
	1982-MA	6	4	7	7	6	9	4	6	7	5	61
American Studies	1988-PhD	5	5	1	2	5	4	4	7	6	9	48
Anthononology	1979-MA	7	5	5	9	8	5	6	7	8	3	63
Anthropology	2001-PhD	0	0	1	1	0	0	0	4	7	2	15
Applied Coiones	1970-MA/MS	5	5	4	2	11	4	3	4	6	2	46
Applied Science	1990-PhD	4	3	8	6	3	2	2	8	4	6	46
Biology	1963-MA/MS	7	7	11	6	12	6	11	11	8	7	86
Chemistry	1964-MA/MS	6	2	3	5	4	4	7	6	6	8	51
Computer Science 1	1984-MS	17	16	20	19	11	18	26	15	23	17	182
Computer Science	1986-PhD	1	3	3	1	9	3	6	7	6	4	43
History	1955-MA	12	9	13	15	13	22	15	14	12	13	138
Tilstory	1967-PhD	5	7	5	3	3	3	7	3	2	5	43
Physics	1959-MA/MS	11	12	11	11	14	13	9	13	13	5	112
Filysics	1964-PhD	9	9	6	8	6	12	6	5	5	7	73
PsyD	1978-PsyD	10	8	10	5	4	0	0	0	0	0	37
Psychology	1953-MA	9	7	6	9	8	4	7	4	8	12	74
Public Policy	1991-MPP	21	20	25	16	25	19	19	20	19	18	202
	MA/MS/MPP	101	87	105	90	112	104	107	100	110	90	1006
Totals	PhD	24	27	24	21	26	24	25	34	30	33	268
	PsyD	10	8	10	5	4	0	0	0	0	0	37

¹ Includes Computational Operations Research.