UNIVERSITY SENATE | AGENDA | SEPTEMBER 8, 2021

3:15PM – 5:00PM | – ZOOM

1. Call to Order

2. Approval of the May 11, 2020 Senate Minutes (Action)

3. Report of the Chair

4. Special Order

   Reka S. Montfort
   Director, University Senate
   Orientation: Senators, Senate Meetings, and Shared Governance

5. 2020-2021 Senate Legislation Log (Senate Document #21-22-01) (Information)

6. Technical Revisions to the University of Maryland Policy on Promoting Responsible Action in Medical Emergencies (V-1.00[J]) (Senate Document #21-22-03) (Information)

7. Approval of the 2021-2022 Committee & Council Slates (Senate Document #21-22-02) (Action)

8. PCC Proposal to Establish a Doctorate in Business Administration (Senate Document #21-22-06) (Action)

9. PCC Proposal to Establish a Post-Baccalaureate Certificate in Remote Sensing (Senate Document #21-22-07) (Action)

10. Review of the Interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (Senate Document #20-21-38) (Action)

11. Revision to the Senate Bylaws to Extend the Term of the Special Committee on University Finance (SCUF) (Senate Document #21-22-05) (Action)

12. New Business

13. Adjournment

UNIVERSITY SENATE | MINUTES | MAY 11, 2021

3:15PM – 5:00PM | VIRTUAL MEETING - ZOOM | MEMBERS PRESENT: 198

CALL TO ORDER

Senate Chair Laura Dugan called the meeting to order at 3:15 p.m.

Dugan welcomed new Senators. She reviewed the procedures and guidelines for the virtual Senate meeting including expectations, audio recording, discussion, and voting. She provided a brief overview of voting procedures using the TurningPoint platform.

ELECTION OF THE SENATE CHAIR-ELECT (ACTION)

Rochelle Newman and William Reed were identified as the candidates for Chair-Elect. Both candidates are from the College of Behavioral & Social Sciences (BSOS). Rochelle Newman was elected Chair-Elect.

APPROVAL OF THE MAY 4, 2021 SENATE MINUTES

The minutes were approved as distributed.

SPECIAL ORDER: PRESIDENTIAL BRIEFING

Dugan welcomed President Pines to provide his briefing.

President Pines thanked the Inauguration Committee, the Implementation Committee, the Division of University Relations, University Alumni Relations, the Office of Strategic Communications, and the staff at the Clarice Smith Performing Arts Center for their work on his inauguration events.

President Pines provided an overview of the five strategic announcements that he announced on Inauguration Day.

- The campus will be net carbon neutral by Earth Day in 2025;
    - The University vehicle fleet will be all electric by 2035.
- $40 million will be invested in diverse faculty hires through the Faculty Advancement at Maryland for Inclusive Learning and Excellence (FAMILE) initiative;
- The Cole Field House football performance center will be named after University athletic trailblazers Billy Jones and Darryl Hill;
- $200 million will be invested in the University's research and innovation ecosystem over a ten-year period; and
- The Arts for All arts initiative will be launched.

President Pines provided an update on COVID-19 testing and vaccination and guidance for returning to campus.

- In the past week, two cases tested positive for COVID-19 out of 6950 tests.
    - This is one of the lowest rates at the University during the pandemic.

- 100% of quarantine isolation housing is available for the first time since August 2020.
- 74% of campus community members who come to campus on a regular basis have received at least one vaccination.
    - Almost 50% of faculty and 60% of staff who come to campus are vaccinated.
- Every member of the campus community who comes to campus must be vaccinated by August 2, 2021 unless they have a religious or medical exemption.

President Pines provided an update on the Spring 2021 Commencement exercises.

- All colleges will hold virtual Commencement ceremonies.
- The main Commencement ceremonies will be held in person at Maryland Stadium on Friday, May 21, 2021.
    - The College of Arts & Humanities, the College of Behavioral & Social Sciences, the Robert H. Smith School of Business, the College of Education, the Office of Extended Studies, the Philip Merrill College of Journalism, and the School of Public Policy will hold their commencement exercises at 11:00 am.
    - The College of Agriculture and Natural Resources, the School of Architecture, Planning and Preservation, the College of Computer, Mathematical, and Natural Sciences, the A. James Clark School of Engineering, the College of Information Studies, the School of Public Health, and the Office of Undergraduate Studies will hold their commencement exercises at 4:00 pm.
    - Seating assignments will be socially distant.

President Pines provided an update on freshman enrollment for the 2021-2022 academic year.

- The largest number of applications was received in the history of the University.
    - Admissions were test-optional and used the Common Application.
- The University received a 56% increase in applications for Fall 2021.
- The incoming freshman class will be the largest in the history of the University by 600 students.
- Applications and confirmations for African-American and Latinx students increased from previous years.
    - African-American students represent 10.2% of the student population that has confirmed; and
    - Latinx students represent 9.2% of the student population that has confirmed.
- The University estimates a 3-5% summer melt for in-state students and 7-10% for out of state students.

President Pines thanked outgoing leaders for their service.

- Chair Dugan;
- Dan Alpert, outgoing President of the Student Government Association (SGA);
- Dan Laffin, outgoing President of the Graduate Student Government (GSG); and
- Luke Jensen, Founding Director of the LGBT Equity Center.
    - Jensen is retiring after 33 years on campus.

President Pines welcomed incoming leaders.

- Senate Chair-Elect Ellen D. Williams;
- Kislay Parashar, incoming SGA President;
- Tamara Allard, the incoming GSG President;
- New Senators;
- Incoming Senate Chair-Elect Rochelle Newman; and
- Incoming Senior Vice President and Provost Jennifer King Rice.

- Rice will begin her position as Provost on August 1, 2021.

President Pines shared that videos for the TerrapinSTRONG onboarding program have been developed and will be used going into the fall semester.

Dugan thanked President Pines for his presentation and opened the floor to questions.

Senators congratulated President Pines on his inauguration and leadership. Senators inquired if faculty members will be able to hood their doctoral students at the main Commencement ceremony.

President Pines stated that doctoral students will not be hooded at the ceremony. He noted that 1200 students who graduated in 2020 will also be recognized.

Senators asked if there has been bargaining with AFSCME for mandatory vaccination as a term of employment and inquired whether employees will be provided with information about the vaccine in languages other than English.

President Pines stated that the University is working on guidance for faculty, staff, and AFSCME, which should be released shortly. He stated that Spyridon Marinopoulos, Director of the University Health Center, is developing FAQ documents for the campus community that are expected to be released in multiple languages.

Senators expressed excitement about the University's emphasis on inclusive excellence and requested more information about the FAMILE program.

President Pines stated that FAMILE is a campus-wide initiative to create a more inclusive environment, increase the University's excellence, and reflect the student body served by the University by expanding representation for tenured/tenure-track faculty from underrepresented backgrounds.

Dugan stated that President Pines would take the two remaining questions.

Senators inquired how frequently the 4Maryland Guidelines will be updated for the fall semester and how closely the University will be following Governor Hogan's mandates. Senators inquired why the $100 incentive provided by Governor Hogan to State of Maryland employees for vaccination was not provided to University employees. Senators noted that there has been hesitancy among some campus community members to be vaccinated.

President Pines stated that the University is constantly in contact with the Maryland Department of Health and Prince George's County and will be updating guidance for the campus community in the next few weeks. He stated that the University does not understand why the Governor's incentive was not provided to University System of Maryland employees. President Pines stated that the University has tried to overcome vaccine hesitancy by making the vaccine available to the members of the campus community and their families through partnerships between the University Health Center, the State of Maryland, and Prince George's County, and Safeway.

Dugan thanked President Pines and expressed gratitude for his leadership during the past year.

SLATES FOR THE 2021 TRANSITION ELECTIONS (SENATE DOCUMENT #20-21-44) (INFORMATION)

Dugan stated that all Senators and Deans should have received the slates and statements for all of the candidates running in the Transition Elections for the Senate's elected committees and councils on April 28, 2021, and with the meeting materials. She stated that all of the elected committee and council elections will be held online starting immediately after this meeting and provided instructions for online voting for the Transition Elections.

Nominations were taken from the floor for faculty, staff, and student representatives for the Senate Executive Committee (SEC), the Committee on Committees, the University Athletic Council, the Council of University System Faculty (CUSF), and the Campus Transportation Advisory Committee (CTAC).

Senator Hilsenrath, undergraduate student, College of Computer, Mathematical, & Natural Sciences, self-nominated as a candidate for the SEC.

Senator Sobalvarro, part-time undergraduate student, College of Computer, Mathematical, & Natural Sciences, self-nominated as a candidate for the SEC.

Dugan stated that Senators will have until 4:00 p.m. on Friday, May 14, 2021, to complete online voting. Winners will be announced after voting is closed.

REPORT OF THE OUTGOING CHAIR (INFORMATION)

Dugan reminded the Senate that at the beginning of her term as Chair in May 2020, she asked Senators to take their roles very seriously as many Senators are their constituencies' only lifeline to the campus community. She reminded Senators that she also promised to do the same and it became very clear early in her role as Chair that Senators did so. Dugan noted that this past year was important because the actions taken by the Senate were likely to set the tone for collaboration with the new administration for years to come. She stated that it became clear early on that President Pines is committed to establishing a collaborative relationship with the Senate to ensure that the University has a healthy commitment to shared governance. Dugan stated that nearly all policies and practices developed by the University are established with input from persons who will be affected by those policies and practices because of the commitment to shared governance.

Dugan stated that Senators can be very proud of their commitment to shared governance this year despite operating during a global pandemic, learning how to manage the virtual environment, managing children at home, caring for sick relatives, and working hard to avoid contagions.

Dugan provided an overview of the Senate's work in the past year.

- The Senate voted on 42 action items that have come out of Senate committees.
    - Only 12 pending charges remain, most of which were introduced in the Spring 2021 semester and will take time to complete.
    - This year's Senate session had the highest efficiency rate in at least the past decade.
- 21 new programs, program changes, or name changes were approved.
- Senate committees revised policies and procedures such as:
    - The Proposal to Review Policy and Practice Surrounding PTK Non-Renewals (Senate Document #18-19-33);

    - The Interim University of Maryland Policy on Leave Without Pay for Faculty (Senate Document #19-20-26);
    - The Review of the University of Maryland Policy and Procedures for the Establishment and Review of Centers and Institutes (Senate Document #17-18-12);
    - The University of Maryland Policy on Sexual Harassment and Other Sexual Misconduct (Senate Document #20-21-03)
    - The University of Maryland Procedures on Sexual Harassment and Other Sexual Misconduct (Senate Document #20-21-08); and
    - The Review of the University of Maryland Policy and Procedures for the Use of Facilities and Outdoor Spaces and Guidelines for Expressive Activity (Senate Document #20-21-11).
- Committees also worked on new proposals to address the concerns of the campus community such as:
    - Support for Students Dealing with Difficult Life Decisions:
    - The Emergency Pass/Fail Guidelines for the University of Maryland (Senate Document #20-21-33); and
    - The Proposal to Establish a Consensual Relationships Policy (Senate Document #18-19-37).
- These efforts showed the Senate's responsiveness to the needs of the campus community during crises and provided protection to students under trying circumstances.

Dugan expressed appreciation for Senators' focus and enthusiasm for shared governance. She thanked members of the Senate committees and the committee chairs. Dugan stated that these leaders have ensured that the recommendations produced by the committees are based on research, best practices, and feedback solicited from those who would be affected by the recommendations and those responsible for implementing them. She thanked Senate Director Montfort for keeping all of the moving parts of the Senate engaged and allowing the Senate to focus on their specific roles while thoughtfully moving items forward.

REPORT OF THE INCOMING CHAIR (INFORMATION)

Chair Williams thanked Dugan for her service to the Senate and leading with grace and wisdom throughout the challenges due to the COVID-19 pandemic and in representing the Senate during the change in administration. Williams presented Dugan with a plaque in recognition of her service as Chair and invited Dugan to provide parting remarks.

Dugan thanked the Senate for the plaque.

Williams expressed her appreciation for the opportunity to serve as Senate Chair. She stated that the Senate will have another challenging year during the transition back to campus for which many decisions and adaptations will need to be made. Williams stated that the Senate will have the opportunity to build on the positive engagement that the Senate has already experienced with the University administration and use that connection to help inform and represent Senators' constituencies in the decisions ahead.

Williams stated that much of the work of the Senate takes place in Senate committees. All Senators will have the chance to learn about committee work and provide input. She noted that the agendas and documents provided prior to the meeting provide a wealth of information and that the work of the Senate can be most effective when the agendas and documents for each Senate meeting are

reviewed in advance. Williams stated that she is looking forward to working with the Senate in the upcoming year and thanked Senators for their willingness to serve.

Williams shared the Senate meeting schedule for the 2021-2022 academic year. The Senate tries to balance meetings between the Wednesday schedule and Tuesday/Thursday schedule so Senators do not have to miss all of the meetings because of class conflicts. Senate meetings will continue to be held from 3:15 p.m. - 5:00 p.m. Location and format will be determined based on Prince George's County Health Department guidelines for large group meetings at the start of the fall semester.

SPECIAL ORDER

Nate Burke
Chair, University of Maryland Sexual Assault Prevention Committee and Assistant Director, University Health Center

Tamara M. Saunders
Co-Chair, University of Maryland Sexual Assault Prevention Committee and Special Assistant and Training Manager for Policy and Prevention, Office of Civil Rights & Sexual Misconduct

Annual Update from the UMD Sexual Assault Prevention Committee

Williams welcomed Nate Burke, Chair of the University of Maryland Sexual Assault Prevention Committee and Assistant Director of the University Health Center, and Tamara M. Saunders, Co-Chair of the University of Maryland Sexual Assault Prevention Committee and Special Assistant and Training Manager for Policy and Prevention, to provide their presentation.

Saunders explained that the Sexual Assault Prevention Committee (SAPC) is a committee of stakeholders who meet monthly to implement and coordinate the University of Maryland's Sexual Assault Prevention Plan. She stated that the University continues to have an enduring senior leadership commitment to fulfill and enhance sexual assault prevention efforts.

Saunders provided an overview of the services provided by the Office of Civil Rights & Sexual Misconduct (OCRSM).

- OCRSM oversees and ensures compliance with Title IX regulations as well as federal and state civil rights laws.
- OCRSM receives and investigates complaints of sexual misconduct, discrimination, and harassment.
- All complaints of sexual misconduct, discrimination, and harassment should be reported to OCRSM.
- OCRSM is not a confidential resource.

Burke provided highlights of the services provided by Campus Advocates Respond and Educate (CARE) to Stop Violence.

- All services at CARE are free and confidential.
- CARE provides therapy and advocacy services for individuals;
    - Support and therapy groups;
    - A 24-hour crisis response number; and

    - A victim assistance fund to cover costs survivors might incur.
- Education and outreach programs provided by CARE reach almost all of the first-year students by providing the Step UP! bystander intervention program presentation in UNIV100 courses and Honors programs.
    - Additional workshops for classes and student organizations are available.
- CARE provides programming on campus and with the community to raise awareness and visibility.
    - The Clothesline Project;
    - Purple Lights;
    - Take Back The Night; and
    - Self-care programs for LGBTQ identified and Black identified campus community members.
- CARE provides consultations about University resources on a regular basis.

Saunders provided background information on the joint President/Senate Sexual Assault Prevention Task Force.

- The Task Force was created in October 2016 to develop a comprehensive plan for sexual assault prevention and to determine an implementation plan.
- During the fall 2016 semester, the Task Force:
    - Focused on prevention programs and initiatives in place at that time;
    - Considered guidance from the federal government on sexual assault prevention efforts;
    - Reviewed education and training recommendations from an outside consulting firm;
    - Conducted interviews with administrators at peer institutions;
    - Held a forum to gather feedback from the campus community; and
    - Established an anonymous online comment form to gather additional input from the community members throughout the review.
- In Spring 2017, consultations continued and subcommittees were formed relative to programming, curricula, and communication plans.
- In March 2017, the Task Force approved the following recommendations:
    - Establishing SAPC to carry out the task force recommendations.
    - Sequential student programming as it pertains to undergraduate students, graduate students, and student organization training.
    - College action plans designed to raise awareness about sexual misconduct prevention resources, reporting options, and reporting obligations of faculty and staff within their respective colleges.
    - University-sponsored events, providing a series of opportunities to include prominent speakers, panel discussions, artistic performances, and other appropriate events.
    - A centralized prevention website to provide one easy to navigate location with information about University resources, services, policies, and other necessary information relative to sexual assault prevention efforts and sexual misconduct.
    - The Raise Your Voice messaging campaign.
- The Senate approved the Task Force report in April 2017.

Burke provided information on the implementation timeline.

- The initial launch of the five-year plan was delayed by a year due to staff vacancies.
- The University is currently completing year three of the implementation plan.
- The University is on track for completing the plan in five years.

- The committee has recently decided to revisit the implementation of the plan for the assessment of current training and prevention initiatives to continue strengthening efforts to integrate the experiences of marginalized populations.

Burke provided information about the current activities of SAPC.

- In 2020-2021, SAPC has:
    - Accomplished its optional second year undergraduate and student organization leadership programming;
    - Made progress on future goals including a Student Leader Summit to be launched next year; and
    - Created optional programming for fourth-year students.
- Current activities of SAPC include:
    - The Raise Your Voice Campaign;
    - A centralized website;
    - A log of activities that students or other parties at the University might be doing to raise awareness of sexual violence;
    - Creating and providing guides for College action plans;
    - Online training modules;
    - In-person training; and
    - University-wide programming and events.
- The CARE Office hosted a SAPC retreat to work with the SAPC on strategic planning and offer continuing education sessions.

Burke provided information on the Step UP! Training.

- 82% of first year students are trained in bystander intervention through the peer-led Step UP! Training in their first-year classes.
    - This percentage has increased slightly each year.
- The virtual environment allowed for smaller classes than in previous years.
- SAPC funds were used to pay students to present the training modules for the first time.

Saunders provided information about the Raise Your Voice website and updates on SAPC leadership and current activities.

- The task force report, information about members of SAPC, a calendar of SAPC activities, and meeting minutes can be accessed on the website.
- The website also provides information about prohibited conduct, where to seek support on-campus or off-campus, noting what resources are confidential, and resources to include sample statements in syllabi.
- Paul Gold, Associate Professor in the Department of Counseling, Higher Education, and Special Education will be serving as the faculty liaison for the College Action Plans along with Tammatha O'Brien, Principal Lecturer in the Department of Entomology.
- SAPC is looking forward to rolling out the toolkit of resources to the campus community over the summer.
- Third-year students will be preparing for their training but no plans are in place to make the training required.
    - SAPC may reevaluate this requirement going forward.
    - Training is also provided for graduate students, graduate assistants, faculty and staff, and new hires.

Burke thanked the Senate and encouraged Senators to reach out with any questions or to learn more about the work of SAPC.

Williams thanked Burke and Saunders and opened the floor for questions.

Senators thanked Burke and Saunders for their comprehensive presentation. Senators inquired if demographic data about sexual violence cases is available. Senators shared the opinion that having demographic data would enable the University to have more effective remedies.

Saunders stated that not all demographic data is collected but all annual reports are published on the OCRSM website. The reports focus on student sexual misconduct and staff and faculty data is not published. Saunders stated that the Title IX Officer continues to evaluate the type of data that is published. Data is also provided from a campus climate survey conducted every two years by the School of Public Health. Saunders stated that the Title IX Officer and the School of Public Health are currently reviewing the data.

Burke encouraged Senators to review the Task Force report on the Raise Your Voice website that produced the recommendations that the SAPC is implementing.

Senators inquired about what peer institutions within the Big 10 are doing for sexual assault prevention efforts and if the University may consider any of these options in the future.

Burke stated that the CARE Office is reviewing all of its curricula and programs in depth this summer to ensure that everything is up-to-date with the most recent research-based evidence. He stated that the University has been in frequent communication with peer institutions due to the changes in the Title IX regulations and to discuss what efforts could be on the horizon. Burke stated that SAPC will continue to look at bystander intervention training while considering the intersections of race and ethnicity.

Saunders noted that peer institutions are also focused on the new Title IX regulations.
She stated that SAPC is considering participating in the Culture of Respect project through the National Association of Student Personnel Administrators (NASPA), which is a 2 year program that brings together institutions interested in ending campus sexual violence, and exploring more grant opportunities to enhance sexual assault prevention efforts.

Senators asked how the counseling provided by CARE overlaps with services offered by the University Counseling Center. Senators inquired how CARE reaches special populations such as international students and employees who speak English as a second language. Senators shared the perspective that some people may not feel comfortable coming to CARE because of concerns about retaliation.

Burke clarified that the primary distinction is that the CARE team works specifically with sexual violence or relationship violence. He stated that CARE tries to partner with all places where counseling is offered on campus, which may also refer people to CARE. Burke stated that the CARE office is a confidential resource that facilitates support services and provides prevention education materials. The CARE office is working to expand the materials by language and offers therapy and advocacy in Spanish. Burke stated that he shared information about CARE at an UndocuTERPS training session and encouraged campus community members concerned about retaliation to start with CARE because it is a confidential resource and does not share information.

Saunders shared that a number of University Human Resources trainers have received recent training from the Maryland Commission on Civil Rights to deliver quality training to individuals who might not have computer access. She stated that retaliation is strongly prohibited, and OCRSM encourages individuals to report. Saunders shared that she expects more proactive approaches will be developed to enhance prevention efforts and have a wider impact on the campus.

Burke shared his hope that campus community members will be receiving more comprehensive language through their respective Schools as SAPC builds upon the College Action Plan this summer.

Williams thanked Burke and Saunders for their presentation

NEW BUSINESS

Senator Smith, faculty, School of Public Health, shared the perspective that some campus community members may be concerned about the emergency use of the COVID-19 vaccination. He shared the perspective that the mandate that all campus community members must be vaccinated before returning to campus could be considered financial coercion and undue influence, and violate the principle of informed consent. Senator Smith expressed concern that essential workers and students may be afraid that expressing concerns about vaccination will cause a loss of employment or student status. He encouraged Senators to make their concerns known to the administration.

Williams clarified that the purpose of New Business is for Senators to introduce a motion for a specific action. She clarified that the vaccine mandate was decided and announced by the Chancellor of the University System of Maryland (USM) and applies to all students, faculty, and staff on campuses within the USM. The mandate allows for exceptions to be granted on the basis of medical or religious reasons. Williams stated that the University does not have the flexibility to make its own decision on whether vaccination should be required for the fall semester.

ADJOURNMENT

The meeting was adjourned at 4:54 p.m.


The University Senate and Shared Governance at the University of Maryland
UNIVERSITY OF MARYLAND
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Senate's Role
Senate Meetings
This Year

Senate's Role

- The Senate advises the President of the University
  - Policy Matters
  - Guiding Documents
  - Academic Programs

Role of Senators

- Review Senate Materials prior to Senate meetings
- Attend Senate Meetings
- Discuss Committee Recommendations
- Vote on Committee Recommendations

Materials

Meetings

Committee Reports

Voting


This Year
• UMD Privacy Policy
• Emergency Pass/Fail Guidelines
• Conflict of Interest & Conflict of Commitment Policies
• Criminal Background Check Policy for Employees
• University's Strategic Plan
• UMD Plan of Organization for Shared Governance Review
• Diversity General Education Program
• Policy on Naming of Academic Programs
• College Plans of Organization
Legislation Tracker

UNIVERSITY SENATE | TRANSMITTAL | #21-22-01

University Senate Office

Senate Legislation Log

PRESENTED BY	Reka S. Montfort, Executive Secretary & Director
REVIEW DATES	SEC – August 26, 2021 | SENATE – September 8, 2021
VOTING METHOD	For information only
RELEVANT POLICY/DOCUMENT	N/A
NECESSARY APPROVALS	N/A

ISSUE

The Senate Legislation Log is an overview of the work brought to the Senate during the 2020-2021 academic year. The log shows all completed legislation as well as dates of subsequent approvals following Senate approval. In addition, there is a table of continuing legislation that was not completed last year but will continue into the 2021-2022 academic year.

RECOMMENDATION(S)

The Legislation Log is provided for informational purposes.

COMMITTEE WORK

N/A

ALTERNATIVES

N/A

RISKS

N/A

FINANCIAL IMPLICATIONS

N/A

2020 - 2021 Senate Legislation Log

Completed University Senate Legislation 2020-2021

Senate Document Number	Action	Date of Senate Meeting Action	Disposition	Approval Date(s)	Completion Date
12-13-37	Revisions to the College of Information Studies (INFO) Plan of Organization	10/07/2020	Presidential Approval	10/09/2020	10/09/2020
17-18-12	Review of the University of Maryland Policy and Procedures for the Establishment and Review of Centers and Institutes	04/20/2021	Presidential Approval	04/27/2021	04/27/2021
18-19-21	Proposal on Support for Students Dealing with Difficult Life Conditions	08/19/2020	Complete: The SEC reviewed the response to the proposal as an information item.		08/28/2020
18-19-22	PCC Proposal to Establish a Post-Baccalaureate Certificate in Innovation and Entrepreneurship	02/05/2019	Presidential Approval Chancellor's Approval MHEC Approval	02/12/2019 08/20/2020 01/29/2021	01/29/2021
18-19-33	Proposal to Review Policy and Practice Surrounding PTK Non-Renewals	12/08/2020	Presidential Approval	12/10/2020	12/10/2020
18-19-37	Proposal to Establish a Consensual Relationships Policy	05/04/2021	Presidential Approval	05/10/2021	05/10/2021
19-20-12	PCC Proposal to Establish a Doctorate of Public Health	09/12/2019	Presidential Approval BOR Approval Complete: The proposal was rejected by MHEC	09/24/2019 11/22/2019 02/21/2020	02/21/2020
19-20-26	Interim University of Maryland Policy on Leave Without Pay for Faculty	05/04/2021	Presidential Approval	05/10/2021	05/10/2021
19-20-37	Apportionment of the University Senate	12/08/2020	Complete: The SEC approved the new apportionment and asked the Senate Office implement the new apportionment in the 2020-2021 election cycle. The Senate reviewed the report as an information item.		12/08/2020
19-20-47	2020 Council of University System Staff Elections	09/08/2020	Complete: The Senate reviewed the election results as an informational item.		09/08/2020
19-20-51	Review of the UMCP Policies and Procedures Concerning Telephone System Usage	10/07/2020	Presidential Approval	10/09/2020	10/09/2020
19-20-52	Senate Consideration of a Proposal to Rename the Department of Women's Studies	N/A	BOR Approval	06/19/2020	09/04/2020
20-21-01	2019-2020 Legislation Log	09/08/2020	Complete: The Senate reviewed the legislation log as an information item.		09/08/2020
20-21-02	Approval of the 2020-2021 Committee & Council Slates	09/08/2020	Presidential Approval	09/11/2020	09/11/2020
20-21-03	Interim University of Maryland Policy on Sexual Harassment and Other Sexual Misconduct	05/04/2021	Presidential Approval	05/10/2021	05/10/2021
20-21-04	Technical Revisions to the University of Maryland Non-Discrimination Policy and Procedures	10/07/2020	Complete: The Senate reviewed the technical revisions as an information item.		10/07/2020

Senate Document Number	Action	Date of Senate Meeting Action	Disposition	Approval Date(s)	Completion Date
20-21-05	Technical Revisions to the University of Maryland Code of Student Conduct V-1.00(B)	09/08/2020	Complete: The Senate reviewed the technical revisions as an informational item.		09/08/2020
20-21-06	Proposal to Review the Administration of the Adjudication Process for the Faculty Grievance Policy	03/03/2021	Presidential Approval	03/05/2021	03/05/2021
20-21-07	Technical Revisions to the University of Maryland Disability & Accessibility Policy and Procedures (VI-1.00[D])	09/08/2020	Complete: The Senate reviewed the technical revisions as an information item.		09/08/2020
20-21-08	Interim University of Maryland Procedures on Sexual Harassment and Other Sexual Misconduct	05/04/2021	Presidential Approval	05/10/2021	05/10/2021
20-21-09	University Senate Provisions on Virtual Meetings	12/08/2020	Presidential Approval	12/10/2020	12/10/2020
20-21-11	Review of the Interim University of Maryland Policy and Procedures for the Use of Facilities and Outdoor Spaces and Guidelines for Expressive Activity	04/20/2021	Presidential Approval	04/27/2021	04/27/2021
20-21-12	PCC Proposal to Establish a Post-Baccalaureate Certificate in Technology Management	11/10/2020	Presidential Approval Chancellor Approval MHEC Approval	11/12/2020 04/12/2021 07/12/2021	07/12/2021
20-21-13	PCC Proposal to Establish a Post-Master's Certificate in Bilingual Speech-Language Pathology for Practitioners	11/10/2020	Chancellor's Approval MHEC Approval Presidential Approval	04/12/2021 05/21/2021 11/12/2020	05/21/2021
20-21-16	Review of the Senate Bylaws to Ensure Alignment with Current Senate Practices	04/06/2021	Presidential Approval	04/09/2021	04/09/2021
20-21-17	Nominations Committee Slate 2020-2021	12/08/2020	Presidential Approval	12/10/2020	12/10/2020
20-21-18	PCC Proposal to Establish a Bachelor of Science in Mechatronics	12/08/2020	Presidential Approval BOR Approval Complete: The proposal was rejected by MHEC	12/10/2020 02/19/2021 07/29/2021	07/29/2021
20-21-19	PCC Proposal to Establish a Master of Extension Education	12/08/2020	Presidential Approval BOR Approval MHEC Approval	12/10/2020 04/16/2021 05/06/2021	05/06/2021
20-21-21	PCC Proposal to Rename the Upper Division Certificate in Lesbian, Gay, Bisexual, and Transgender Studies to LGBTQ Studies	12/08/2020	Presidential Approval Chancellor's Approval MHEC Approval	12/10/2020 05/24/2021 07/12/2021	07/12/2021
20-21-22	PCC Proposal to Rename the Bachelor of Arts in “Germanic Studies” to “German Studies”	12/08/2020	Presidential Approval Chancellor Approval MHEC Approval	12/10/2020 05/24/2021 08/03/2021	08/03/2021
20-21-23	PCC Proposal to Rename the Master of Arts in “German Language and Literature” to “German Studies”	12/08/2020	Presidential Approval Chancellor Approval MHEC Approval	12/10/2020 05/24/2021 08/03/2021	08/03/2021
20-21-24	PCC Proposal to Rename the Ph.D. in “German Language and Literature” to “German Studies”	12/08/2020	Presidential Approval Chancellor Approval MHEC Approval	12/10/2020 05/24/2021 08/03/2021	08/03/2021

Senate Document Number	Action	Date of Senate Meeting Action	Disposition	Approval Date(s)	Completion Date
20-21-25	Amendments to Provisions on Minutes within the Senate Bylaws	11/10/2020	Presidential Approval	11/12/2020	11/12/2020
20-21-26	Review of the University of Maryland, College Park Policy Concerning the Use of Telecommunications Wiring and Facilities	05/04/2021	Presidential Approval	05/10/2021	05/10/2021
20-21-27	Deactivation of the University of Maryland, College Park Policy Concerning Telecommunications Evaluations	02/09/2021	Presidential Approval	02/11/2021	02/11/2021
20-21-29	PCC Proposal to Rename the Ph.D. in "Survey Methodology" to "Survey and Data Science"	02/09/2021	Presidential Approval Chancellor Approval MHEC Approval	02/11/2021 05/24/2021 08/03/2021	08/03/2021
20-21-30	Proposal to Revise the University's Parental Leave Policies	N/A	Complete: The proposer received a letter from the SEC explaining its decision not to charge a committee with reviewing the proposal.		02/22/2021
20-21-31	Campus-Wide Feedback System	N/A	Complete: The proposer withdrew the proposal after further consideration.		01/11/2021
20-21-32	Amendment to the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy	N/A	Presidential Approval	01/22/2021	01/22/2021
20-21-33	Emergency Pass/Fail Guidelines for the University of Maryland	N/A	Presidential Approval	01/22/2021	01/22/2021
20-21-34	PCC Proposal to Establish a Bachelor of Science in Fermentation Science	03/03/2021	Presidential Approval BOR Approval MHEC Approval	03/05/2021 06/17/2021 08/03/2021	08/03/2021
20-21-35	PCC Proposal to Establish a Bachelor of Science in Social Data Science	04/06/2021	Presidential Approval BOR Approval MHEC Approval	04/09/2021 06/17/2021 08/03/2021	08/03/2021
20-21-36	PCC Proposal to Rename the Upper-Division Certificate Program in "Women's Studies" to "Women, Gender, and Sexuality Studies"	03/03/2021	Presidential Approval Chancellor Approval MHEC Approval	03/05/2021 05/24/2021 08/16/2021	08/16/2021
20-21-37	PCC Proposal to Rename the Bachelor of Arts in "Women's Studies" to "Women, Gender, and Sexuality Studies"	03/03/2021	Presidential Approval Chancellor Approval MHEC Approval	03/05/2021 05/24/2021 08/16/2021	08/16/2021
20-21-44	Slates for the 2021 Transition Elections	05/14/2021	Complete: The Senate conducted the elections.		05/14/2021
20-21-45	BOR Staff Awards 2020-2021	N/A	Complete: The BOR approved the final Staff Awards for 2021, including two awards for UMD nominees.		07/01/2021

University Senate Legislation 2020-2021 Pending Approval

Senate Document Number	Name	Date Received	Requester	Senate Status
20-21-20	PCC Proposal to Modify the Master of Public Health - Add Health Care Management Concentration	10/02/2020	Luisa Franzini, School of Public Health	Pending Approval. Waiting on approvals from BOR Approval,
20-21-28	PCC Proposal to Establish a Post-Baccalaureate Certificate in Latin American and Caribbean Studies	10/02/2020	Merle Collins and Eric Tomalá, College of Arts and Humanities	Pending Approval. Waiting on approvals from BOR Approval,
20-21-39	PCC Proposal to Establish a Post-Baccalaureate Certificate in Dual Language Education	02/26/2021	Melinda Martin-Beltran and Sarah C.K. Moore, from the Department of Teaching and Learning, Policy and Leadership	Pending Approval. Waiting on approvals from MHEC Approval, Chancellor's Approval
20-21-42	PCC Proposal to Establish a Bachelor of Arts in Technology and Information Design	04/02/2021	Kate Izsak and Wayne Lutters, College of Information Studies	Pending Approval. Waiting on approvals from MHEC Approval,
20-21-43	PCC Proposal to Rename the Upper-Division Certificate Program in "Latin American Studies" to "Latin American and Caribbean Studies	03/26/2021	Eric Tomalá, Assistant Director, Latin American Studies Center	Pending Approval. Waiting on approvals from MHEC Approval, Chancellor's Approval

Pending University Senate Legislation 2020-2021

Senate Document Number	Name	Requester	Reviewing Committee	Date Received	Senate Status
Legislation Reviewed from Prior Years					
13-14-37	Revisions to the School of Public Health (SPHL) Plan of Organization	School of Public Health (SPHL)	Elections, Representation, & Governance (ERG) Committee and Faculty Affairs Committee	09/02/2013	Under Review.
18-19-36	Policy on Criminal Background Checks for Faculty and Staff Employees	Jewel Washington - AVP UHR & John Bertot, Associate Provost for Faculty Affairs	Faculty Affairs Committee and Staff Affairs Committee	03/26/2019	Under Review.
19-20-07	Consideration of a Policy on the Naming of Academic Programs	Senate Office	Educational Affairs Committee	08/01/2019	Under Review.
19-20-15	Campus Transportation Advisory Committee (CTAC) Senate Representation	J. David Allen, Director, Department of Transportation	Elections, Representation, & Governance (ERG) Committee	09/13/2019	Under Review.
19-20-24	Revisions to the School of Public Policy (PLCY) Plan of Organization	School of Public Policy (PLCY)	Elections, Representation, & Governance (ERG) Committee and Faculty Affairs Committee	10/29/2019	Under Review.
19-20-33	Review of the University of Maryland Policy on Threatening and Intimidating Conduct	Senate Office	Equity, Diversity, & Inclusion (EDI) Committee	11/25/2019	Under Review.

Senate Document Number	Name	Requester	Reviewing Committee	Date Received	Senate Status
Legislation Reviewed from 2020-2021					
20-21-10	Revisions to the Diversity General Education Requirement	William Cohen, Dean of Undergraduate	Educational Affairs Committee	09/17/2020	Under Review.
20-21-14	Review of the University of Maryland Policy and Procedures on Conflict of Interest and Conflict of Commitment	Laurie Locascio, Vice President for Research	Research Council	10/12/2020	Under Review.
20-21-15	Proposal for the Establishment of a University Privacy Policy	Joseph Gridley, Chief Privacy Officer	IT Council	10/27/2020	Under Review.
20-21-38	Review of the Interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy	SEC	Academic Procedures & Standards (APAS) Committee	03/12/2021	Under Review.
20-21-41	PCC Proposal to Establish a Bachelor of Science in Data Science	Wojtek Czaja, Department of Mathematics, CMNS	Programs, Curricula, & Courses (PCC) Committee	03/26/2021	Under Review.

UNIVERSITY SENATE | TRANSMITTAL | #21-22-03

University Senate Office

Technical Revisions to the University of Maryland Policy on Promoting Responsible Action in Medical Emergencies (V-1.00[J])

PRESENTED BY	Reka S. Montfort, Executive Secretary & Director
REVIEW DATES	SEC – August 26, 2021 | SENATE – September 8, 2021
VOTING METHOD	For information only
RELEVANT POLICY/DOCUMENT	V-1.00(J) – University of Maryland Policy on Promoting Responsible Action in Medical Emergencies
NECESSARY APPROVALS	N/A

ISSUE

The University of Maryland Policy on Promoting Responsible Action in Medical Emergencies (V-1.00[J]) was last reviewed and approved by the President on February 20, 2013 (see Senate Document #11-12-22), with subsequent technical amendments approved by the President in June 2013 and October 2019 to align the policy with revisions made to the Code of Student Conduct (see Senate Document #19-20-22). In more recent revisions to other conduct-related codes and policies, effort has been made to remove gender-inclusive language, in alignment with current University standards and with the principles and spirit behind the University of Maryland Policy on Inclusive Communication (VI-1.00[C]), which was approved in October 2019.

In June 2021, the Office of Student Conduct requested that a technical amendment be made to the Responsible Action Policy to remove gendered language to bring the policy into alignment as well. The University Senate Office worked with the Office of Student Conduct to suggest the necessary revisions. The Senate Leadership reviewed and approved the technical amendments, and they were subsequently reviewed by the Office of General Counsel. The President reviewed the revisions as technical amendments and approved the revised Policy effective August 12, 2021.

RECOMMENDATION(S)

The technical revisions are provided for informational purposes.

COMMITTEE WORK

N/A

ALTERNATIVES

N/A

RISKS

There are no risks to the University posed by these technical revisions.

FINANCIAL IMPLICATIONS

There are no financial implications involved in these technical revisions.

V-1.00(J) UNIVERSITY OF MARYLAND POLICY ON PROMOTING RESPONSIBLE ACTION IN MEDICAL EMERGENCIES

(Approved by the President March 10, 2011; Amended February 20, 2013; Technical Amendments June 26, 2013; Technical Amendments October 1, 2019**; Technical Amendments August 12, 2021**)

I. Purpose

The health and safety of University students is of paramount concern. All members of the University community are encouraged to act in a responsible manner when an individual may require medical assistance by dialing 911 or 301.405.3333 or seeking a University or Department of Resident Life (DRL) official. It is recognized that in situations in which either a student summoning or requiring help is under the influence of alcohol and/or drugs, the threat of disciplinary sanctions for violating the University's alcohol and/or drug policy is a barrier to seeking help. As such, the University of Maryland will do all that it can to promote student health, safety, and well-being. *Promoting Responsible Action in Medical Emergencies* is a policy administered by the Office of Student Conduct (OSC) that will reduce barriers to seeking help in cases of alcohol- and/or drug-related emergencies by providing relief from administrative or disciplinary action on the part of the University if either a University official or other authority is contacted in a timely fashion.

II. Policy

A. A student in possession or under the influence of alcohol and/or drugs who summons medical emergency assistance for ~~him/herself~~ **themselves** or on behalf of a fellow student experiencing a medical emergency will not face disciplinary charges under the *Code of Student Conduct* or *Residence Hall Rules* for the possession or use of alcohol and/or drugs, with the exception of the exclusions noted below. In lieu of disciplinary charges and as a condition of such relief, students handled under this policy will usually be required to be evaluated by the University Health Center (UHC) staff and successfully complete an approved alcohol and/or drug intervention program.

B. This policy also extends to the student for whom medical emergency assistance has been summoned.

C. A "summons" for medical emergency assistance is deemed to be contacting police, University staff or other officials designated emergency medical providers.

III. Procedures

A. Students referred to the OSC or the DRL for alcohol and/or drug use or possession

will be interviewed by a representative of the OSC or DRL. If the student is eligible for conditional relief under this policy, the initiation of disciplinary charges will be "deferred" in accordance with the *Code of Student Conduct* pending successful completion of an approved alcohol and/or drug intervention program, as deemed necessary by UHC staff. If the student successfully completes the program to the satisfaction of the UHC staff and the OSC or DRL, the pending charges will be withdrawn, leaving the student with no disciplinary record. If the student fails to successfully complete the program, disciplinary charges will be processed and, if proven, may result in more severe sanctions and a disciplinary record.

IV. Exclusions

A. The conditional relief from disciplinary charges described in this policy does not extend to charges other than possession or use of alcohol and/or drugs. In addition, it shall not provide relief from disciplinary charges pertaining to the alleged possession or use of alcohol and/or drugs which, if proven, would constitute an "Aggravated Violation" as defined in the *Code of Student Conduct* or would involve the distribution of drugs or the provision of alcohol to a person under the legal drinking age.

B. Students with a prior disciplinary record of alcohol- and/or drug-related violations and students previously granted relief under this policy as the person for whom the emergency services were being summoned, shall only be eligible for relief on a case-by-case basis following an assessment by the OSC or DRL.

C. This policy does not and cannot offer persons conditional relief, immunity, or protection from criminal complaint, arrest, or prosecution by University police or other person or official for illegal activity, including the illegal use or possession of alcohol and/or drugs in violation of County, State, or Federal law. However, State law provides that the "act of seeking medical assistance for another person who is experiencing a medical emergency after ingesting alcohol or drugs may be used as a mitigating factor in a criminal prosecution." See Anno. Code of Maryland, Criminal Procedure Article, Section 1-210. This policy also does not provide relief from any civil suit, fine, or financial obligation to any party (including the University), for loss, damage, or injury associated with alcohol and/or drug use or possession.

D. This policy does not offer conditional relief to student organizations, which remain subject to University-instituted organizational charges for alcohol- and/or drug-related violations, including possession and use. The nature of such charges and any resulting disciplinary sanctions, however, will take into account and may be mitigated by the action taken by organizational representatives. A representative of a student organization who summons medical emergency assistance may be eligible for conditional relief from charges for ~~his or her~~ **their** personal use or possession of alcohol and/or drugs under this policy.

UNIVERSITY SENATE | TRANSMITTAL | #21-22-02

Senate Committee on Committees

2021-2022 Senate Standing Committee & University Council Slates

PRESENTED BY	Rochelle Newman, Chair
REVIEW DATES	SEC – August 26, 2021 | SENATE – September 8, 2021
VOTING METHOD	In a single vote
RELEVANT POLICY/DOCUMENT	N/A
NECESSARY APPROVALS	Senate, President

ISSUE

Presentation of the Senate Standing Committee and University Council Slates, as generated by the Senate Committee on Committees, to be approved by the Senate Executive Committee (SEC) and the University Senate.

RECOMMENDATION(S)

The Committee on Committees recommends that the Senate approve the slates as submitted.

COMMITTEE WORK

The Committee on Committees met on May 28, 2021 and June 3, 2021 to review all of the committee volunteers and their statements. There were 91 membership openings to fill on the ten standing committees of the Senate, and the Committee on Committees received and reviewed 315 volunteer applications from the various constituencies on campus. The committee endeavored to create balanced standing committee memberships, representing a variety of Colleges/Schools, departments/units, disciplines, and gender, to the best of its ability. The committee selected faculty, staff, and student volunteers to fill the 91 open positions. The committee members used the volunteers' top three choices from their preference form to place volunteers onto respective committees. In addition, the Senate Office staff were assigned responsibilities for further recruitment efforts, as needed.

The 2021-2022 Committee on Committees approved the final slate on June 27, 2021. Following the final placements, the Senate Office informed all of the volunteers whether they had been placed on a committee for the 2021-2022 academic year. The Senate Office staff worked with the Chair of the Committee on Committees to fill any vacancies that arose during the summer.

Additionally, the Senate Chair worked with the representative of the Provost on the University Library Council to create a slate of candidates for the Council. In accordance with the University Library Council Bylaws, the slate of appointees was reviewed and approved by the Committee on Committees on September 2, 2021.

The Senate Chair and the Director of the Senate worked with the Vice President for Research to create a slate of appointees for the University Research Council. The Research Council slate was reviewed and approved by the Committee on Committees on September 2, 2021.

The Senate Chair and the Director of the Senate also worked with the Vice President for Information Technology (IT) and Chief Information Officer to create a slate of appointees for the University IT Council. The IT Council slate was reviewed and approved by the Committee on Committees on September 2, 2021.

Any remaining vacancies on committees and councils and vacancies that arise during the academic year will be filled in accordance with the Bylaws.

ALTERNATIVES

The Senate could decide to not approve the slates.

RISKS

There are no risks to the University in approving these slates.

FINANCIAL IMPLICATIONS

There are no financial implications in approving these slates.

Academic Procedures & Standards (APAS) Committee

Nominated

Alice Donlan	Staff	SVPAAP	2023
John Bono	Faculty	BMGT	2023
Caroline Eades	Faculty	ARHU	2023
Alka Gandhi	Faculty	BSOS	2022
Kellie Rolstad	Faculty	EDUC	2023
Monica VanKlompenberg	Faculty	AGNR	2023
Zeena Zakharia	Faculty	EDUC	2023
Bibek Bhattachan	Graduate Student	INEL	2022
Daniel Levy	Undergraduate Student	CMNS	2022
Natan Schoenbaum	Undergraduate Student	ARHU	2022
Rachel Zozobrado	Undergraduate Student	JOUR	2022

Ex-Officio

Adrian Cornelius	Ex-Officio - University Registrar Rep	SVPAAP	2022
Shannon Gundy	Ex-Officio - Director of Undergraduate Admissions Rep	SVPAAP	2022
Lisa Kiely	Ex-Officio - Undergraduate Studies Rep	UGST	2022
William Cohen	Ex-Officio - Provost's Rep	UGST	2022
Brooke Liu	Ex-Officio - Graduate School Rep	ARHU	2022

Continuing Members

John Buchner	Faculty	CMNS	2022
Linda Coleman	Faculty	ARHU	2022
Lee Friedman	Faculty	CMNS	2022
Marilee Lindemann	Faculty	UGST	2022

Chair

John Lea-Cox	Chair	AGNR	2022

Campus Affairs Committee

Vacancies

Ex-Officio - VP University Relations Rep

Nominated

Vandaliah Aderholt	Staff	VPA	2023
Carmen Cantemir-Stone	Faculty	CMNS	2023
Joseph Koivisto	Faculty	LIBR	2023
Lance Yonkos	Faculty	AGNR	2023
Ethan Foley	Graduate Student	EDUC	2022
Pearl Lo	Graduate Student	EDUC	2022
Kiara Anthony	Undergraduate Student	BSOS	2022
Calvin Burns	Undergraduate Student	ENGR	2022

Ex-Officio

Megan Gebregziabher	Ex-Officio - Provost's Rep	SVPAAP	2022
Christopher Lester	Ex-Officio - Vice President for Diversity & Inclusion Rep	PRES	2022
Anne Martens	Ex-Officio - VP Administration and Finance Rep	VPA	2022
Allynn Powell	Ex-Officio - VP Student Affairs Rep	VPSA	2022
Mark Sherburne	Ex-Officio - Chair of Coaches Council Rep	PRES	2022
Annie Rappeport	Ex-Officio - GSG Rep	EDUC	2022
Kislay Parashar	Ex-Officio - SGA Rep	ENGR	2022

Continuing Members

Vanessa Greer	Staff	VPR	2022
Gerald Brust	Faculty	AGNR	2022
Leigh Ann DePope	Faculty	LIBR	2022
Rejanne Le Bivic	Faculty	BSOS	2022

Chair

Nima Farshchi	Chair	BMGT	2022

Educational Affairs Committee

Nominated

Mostafa Ghanem	Faculty	AGNR	2023
Joanna Goger	Faculty	AGNR	2023
Donal Heidenblad	Faculty	INFO	2023
Celina McDonald	Faculty	LIBR	2023
Kellee White	Faculty	SPHL	2023
Yuchen Niu	Graduate Student	INEL	2022
Aaron Wilson	Staff	LIBR	2023
Clarisa De Leon	Undergraduate Student	BSOS	2022
Mark Salman	Undergraduate Student	BSOS	2022

Ex-Officio

Alice Donlan	Ex-Officio - Provost's Rep	SVPAAP	2022
Linda Macri	Ex-Officio - Graduate School Rep	GRAD	2022
Marcio Oliveira	Ex-Officio - Division of Information Technology Rep	DIT	2022
Douglas Roberts	Ex-Officio - Associate Dean for General Education	UGST	2022
Cynthia Stevens	Ex-Officio - Undergraduate Studies Rep	UGST	2022
Tamara Allard	Ex-Officio - GSG Rep	BSOS	2022
Madhulika Nallani	Ex-Officio - SGA Rep	CMNS	2022

Continuing Members

Elizabeth Driver	Staff	EDUC	2022
Joanne Klossner	Faculty	SPHL	2022
Sheila Lalwani	Faculty	ARHU	2022
Adam Lloyd	Faculty	ARHU	2022
Gerald Miller	Faculty	CMNS	2022
David Straney	Faculty	CMNS	2022

Chair

Ross Salawitch	Chair	CMNS	2022

Elections, Representation, & Governance (ERG) Committee

Vacancies

Ex-Officio - Director of Human Resources Rep
Faculty

Nominated

Aaron Tobiason	Exempt Staff	BSOS	2023
Robin Pike	Faculty	LIBR	2023
Marcia Shofner	Faculty	CMNS	2023
Oguz Gencay	Graduate Student	BMGT	2022
Leah Ramnarine	Graduate Student	INEL	2022
Mariam Rahman	Undergraduate Student	ENGR	2022
Matthew Salerno	Undergraduate Student	CMNS	2022

Ex-Officio

Sharon La Voy	Ex-Officio - Associate VP IRPA Rep	SVPAAP	2022

Continuing Members

Ursula Gorham-Oscilowski	Faculty	INFO	2022
Alan Peel	Faculty	CMNS	2022
Hilary Thompson	Faculty	LIBR	2022
Nathan Sparks	Non-Exempt Staff	VPA	2022

Chair

Nick Montgomery	Chair	BSOS	2022

Equity, Diversity, & Inclusion (EDI) Committee

Nominated

Donna Hammer	Exempt Staff	CMNS	2023
Jean LaFonta	Exempt Staff	SVPAAP	2022
Tunji Sawyer	Exempt Staff	PRES	2023
Sheila Lalwani	Faculty	ARHU	2023
Sun Young Lee	Faculty	ARHU	2023
S McDorman	Graduate Student	EDUC	2022
Mel Vallimyalil	Graduate Student	INEL	2022
Robert DuDonis	Non-Exempt Staff	VPA	2023
Shavanah Ali	Undergraduate Student	BSOS	2022
Michael Sobalvarro	Undergraduate Student	CMNS	2022

Ex-Officio

Brandon Dula	Ex-Officio - VP Student Affairs Rep	VPSA	2022
Grace Karmiol	Ex-Officio - OCRSM Rep	PRES	2022
Anne Martens	Ex-Officio - VP Administration & Finance Rep	VPA	2022
Brian Medina	Ex-Officio - Vice President for Diversity & Inclusion or Rep	PRES	2022
Laura Rosenthal	Ex-Officio - Provost's Rep	ARHU	2022

Continuing Members

Jennifer Dixon Cravens	Faculty	AGNR	2022
Temitope Fajingbesi	Faculty	AGNR	2022
Curtis Valentine	Faculty	PLCY	2022
Laurie Walborn	Non-Exempt Staff	PRES	2022

Chair

Jorge Bravo	Chair	ARHU	2022

Faculty Affairs Committee

Vacancies

Ex-Officio - Director of Human Resources Rep
Ex-Officio - CUSF Rep
Ex-Officio - Ombuds Officer

Nominated

Gideon Mark	Faculty Senator	BMGT	2023
Jessica O'Hara	Faculty	SVPAAP	2023
Colleen O'Neal	Faculty	EDUC	2023
Terry Owen	Faculty	LIBR	2023
Jennifer Wallace	Faculty Senator	BSOS	2023
Alex Franklin	Graduate Student	EDUC	2022
Autumn Perkey	Graduate Student	BSOS	2022
Shawn Nijjar	Undergraduate Student	SPHL	2022

Ex-Officio

Michele Eastman	Ex-Officio - President's Rep	PRES	2022
John Bertot	Ex-Officio - Provost's Rep	SVPAAP	2022

Continuing Members

Mary Shelley	Staff	SPHL	2022
Mark Fuge	Faculty	ENGR	2022
Saverio Giovacchini	Faculty Senator	ARHU	2022
Tracy Huard	Faculty Senator	CMNS	2022
Beth St Jean	Faculty	INFO	2022
Wendy Stickle	Faculty	BSOS	2022

Chair

William Reed	Chair	BSOS	2022

Programs, Curricula, & Courses (PCC) Committee

Vacancies

Faculty

Nominated

Mary Warneka	Staff	SVPAAP	2023
Galina Madjaroff	Faculty	INFO	2023
Chandrasekhar Thamire	Faculty	ENGR	2023
Gran Wilson	Faculty	ARHU	2023
Lei Zhou	Faculty	BMGT	2023
Gennifer Godley	Graduate Student	INFO	2022
Abraham Afewerki	Undergraduate Student	SPHL	2022
M Pease	Undergraduate Student	BSOS	2022

Ex-Officio

Lisa Kiely	Ex-Officio - Undergraduate Studies Rep	UGST	2022
Elizabeth Beise	Ex-Officio - Provost's Rep	SVPAAP	2022
Brooke Liu	Ex-Officio - Graduate School Rep	ARHU	2022
Daniel Mack	Ex-Officio - Dean of Libraries Rep	LIBR	2022

Continuing Members

Elsa Barkley Brown	Faculty	ARHU	2022
Elizabeth Honig	Faculty	ARHU	2022
Tatiana Loboda	Faculty	BSOS	2022
Philip Piety	Faculty	INFO	2022
Wade Winkler	Faculty	CMNS	2022

Chair

Valerie Orlando	Chair	ARHU	2022

Staff Affairs Committee

Vacancies

Ex-Officio - Director of Human Resources Rep

Nominated

Raymond Nardella	Exempt Staff (Division)	VPSA	2023
Louisa Nkrumah	Exempt Staff Contingent II	SVPAAP	2023
Manuel Rodriguez	Exempt Staff (Academic)	ARHU	2023
Alex Aiosa	Non-Exempt Staff (Division)	DIT	2023
Shafali Jalota	Non-Exempt Staff Contingent II	ARHU	2022
Amy Yaich	Non-Exempt Staff (Academic)	CMNS	2023
Shivani Paleti	Student	BMGT	2022

Ex-Officio

Amelia Barabak	Ex-Officio - Provost's Rep	SVPAAP	2022
Meredith Carpenter	Ex-Officio - CUSS Rep (Non-Voting)	VPSA	2022
Shirlene Chase	Ex-Officio - VP Student Affairs Rep	VPSA	2022
Elizabeth Hinson	Ex-Officio - CUSS Rep	PLCY	2022
Dolores Jackson	Ex-Officio - CUSS Rep (Non-Voting)	CMNS	2022
Jerry Lewis	Ex-Officio - CUSS Rep (Non-Voting)	UGST	2022
Anne Martens	Ex-Officio - VP Administration & Finance Rep	VPA	2022
Kalia Patricio	Ex-Officio - CUSS Rep	VPSA	2022
Maureen Schrimpe	Ex-Officio - CUSS Rep	VPSA	2022

Continuing Members

Joseph Azzarello	Exempt Staff (Division)	VPUR	2022
Kristin Stenson	Exempt Staff (Academic)	AGNR	2022
Joni Floyd	Faculty	LIBR	2022
Marie-Justine Curney	Non-Exempt Staff (Academic)	ENGR	2022
Anthony Harmon	Non-Exempt Staff (Division)	VPA	2022

Chair

Lisa Klein	Chair	ARHU	2022

Student Affairs Committee

Nominated

Nicole Garcia Diaz	Staff	VPSA	2023
Jennifer Mesiner	Faculty	EDUC	2023
Jingshuai Du	Graduate Student Senator	SPHL	2022
Enwongo Ekah	Graduate Student	INEL	2022
Aaron Roth	Graduate Student	INEL	2022
Michael Wadleigh	Graduate Student Senator	INEL	2022
Leah Williams	Undergraduate Student Senator	INEL	2022
Saxon Brown	Undergraduate Student Senator	EDUC	2022
Denise Burroughs	Undergraduate Student Senator	ARHU	2022
Bhuvan Devarsu	Undergraduate Student	LTSC	2022
Faith Gray	Undergraduate Student	BSOS	2022
John Landsiedel	Undergraduate Student	BSOS	2022
Ruby Liles	Undergraduate Student	ARHU	2022
Bilal Mohammed	Undergraduate Student Senator	ENGR	2022

Ex-Officio

Chetan Joshi	Ex-Officio - VP Student Affairs Rep	VPSA	2022
Susan Martin	Ex-Officio - Graduate School Rep	VPSA	2022
Valronica Scales	Ex-Officio - Resident Life Rep	VPSA	2022
Brian Watkins	Ex-Officio - VP Student Affairs Rep	VPSA	2022
Aldo Gutirrez Mendieta	Ex-Officio - GSG Rep	INEL	2022
Nyah Stewart	Ex-Officio - SGA Rep	BSOS	2022

Continuing Members

Darrell Claiborne	Staff	BMGT	2022
Jade Olson	Faculty	ARHU	2022

Chair

Kassidy Jacobs	Chair	BSOS	2022

Student Conduct Committee

Nominated

Wendy Loughlin	Staff	CMNS	2023
Raul Cruz-Cano	Faculty	SPHL	2023
Jennifer Gershberg	Faculty	BMGT	2023
Emmanuel Wanjala	Student	EDUC	2022
Carlos Williams	Graduate Student	INEL	2022
Andrew Dworski	Undergraduate Student	BMGT	2022
Kara Groisser	Undergraduate Student	BSOS	2022
Khadija Shah	Undergraduate Student	ARHU	2022

Ex-Officio

James Bond	Ex-Officio - Director of Student Conduct (Non-Voting)	VPSA	2022

Continuing Members

Shane Walsh	Faculty	BSOS	2022
Jianhua Zhu	Faculty	AGNR	2022

Chair

Suzanne Ashour-Bailey	Chair	ENGR	2022

IT Council

Vacancies

Enabling Research Working Group Chair

Nominated

Jeffrey Adams	Tenured Faculty	CMNS	2023
Philip Piety	Learning Technology Working Group Chair	INFO	2023
Hallie Oines	Graduate Student	INFO	2022
Eunha Yim	Undergraduate Student	CMNS	2022

Ex-Officio

Jack Blanchard	Ex-Officio - Provost's Rep	SVPAAP	2022
David Dahl	Ex-Officio - Dean of Libraries Rep	LIBR	2022
Jeffrey Hollingsworth	Ex-Officio - VP IT/CIO	DIT	2022
Aaron Gorman	Ex-Officio - IT Student Advisory Committee	CMNS	2022

Continuing Members

Lisa Peterson	Exempt Staff	SVPAAP	2022
Mary Shelley	IT Security Advisory Committee Chair	SPHL	2022
Julie Wright	Enterprise Systems Working Group Chair	ARHU	2022
Jim Zahniser	Infrastructure Working Group Chair	ENGR	2022
Jonathan Resop	Professional Track Faculty	BSOS	2022

Chair

Derek Richardson	Chair	CMNS	2022

Library Council

Vacancies

Graduate Student
Undergraduate Student

Nominated

Progyan Basu	Faculty	BMGT	2023
Linda Coleman	Faculty	ARHU	2023
James Farquhar	Faculty	CMNS	2023
Michele Lamprakos	Faculty	ARCH	2023
David Tomblin	Faculty	ENGR	2023
Jianhua Zhu	Faculty	AGNR	2023

Ex-Officio

Marcio Oliveira	Ex-Officio - Division of IT Rep	DIT	2022
John Bertot	Ex-Officio - Provost's Rep	SVPAAP	2022
Daniel Mack	Ex-Officio - Libraries Rep	LIBR	2022
Rochelle Newman	Ex-Officio - Senate Chair-Elect	BSOS	2022

Continuing Members

Lindsay Carpenter	Library Faculty	LIBR	2022
Mark Demorra	Faculty	AGNR	2022
John Laub	Faculty	BSOS	2022
Shannon Zellars Strohl	Faculty	ARHU	2022

Chair

Brian Butler	Chair	INFO	2022

Research Council

Vacancies

Student
Undergraduate Student

Nominated

Amanda Stein	Staff	ENGR	2023
Rachel Gammons	Faculty	LIBR	2023
Andrew Harris	Faculty	CMNS	2023
Amir Sapkota	Faculty	SPHL	2023
Ji-Cheng Zhao	Faculty	ENGR	2024
Sandra Gutierrez Razo	Graduate Student	INEL	2022

Ex-Officio

Eric Chapman	Ex-Officio - VP Research Rep	VPR	2022
Michele Eastman	Ex-Officio - President's Rep	PRES	2022
Blessing Enekwe	Ex-Officio - Graduate School Rep	GRAD	2022
Wendy Montgomery	Ex-Officio - Director of ORA Rep	VPR	2022
Melissa Thompson	Ex-Officio - Provost's Rep	SVPAAP	2022
Douglas Roberts	Ex-Officio - Undergraduate Studies Rep	UGST	2022

Continuing Members

Amy Pate	Faculty	BSOS	2022
Peter Chung	Faculty	ENGR	2022
Ming Hu	Faculty	ARCH	2022
Debra Shapiro	Faculty	BMGT	2022

Chair

Lisa Taneyhill	Chair	AGNR	2023

Establish a Doctorate of Business Administration (PCC 20043)

PRESENTED BY	Valérie Orlando, Chair, Senate Programs, Curricula, and Courses Committee
REVIEW DATES	SEC – August 26, 2021 | SENATE – September 8, 2021
VOTING METHOD	In a single vote
RELEVANT POLICY/DOCUMENT	N/A
NECESSARY APPROVALS	Senate, President, University System of Maryland Board of Regents, and Maryland Higher Education Commission

ISSUE

The Robert H. Smith School of Business proposes to establish a Doctorate of Business Administration (DBA). The DBA is a practitioner-oriented doctoral-level degree designed for senior executives and researchers in industry and government. The program is different from the Smith School's existing Ph.D. in Business and Management, which trains students to create new theory and methodologies in areas of business and management research. The DBA instead will train students to apply existing theories to specific business problems. The DBA also differs from the existing Master of Business Administration, which is advanced study designed for students to become successful business managers. The DBA program, alternatively, will enroll students who have already achieved success in business and want to build on their expertise by developing their knowledge of business research and theories that can be applied to business or organizational problems. DBA students will learn research methodology, identify important practical problems and relevant data, and apply this knowledge to an actual organization through a culminating capstone project. The program fits the classification of a Professional Practice doctoral degree sanctioned by the Maryland Higher Education Commission.

Students are required to complete a minimum of 54 credit hours beyond a bachelor's degree, or 30 credit hours beyond a master's degree. Students will choose one of three focus areas: information systems, marketing, or finance. Typically, students will take 42 credits in the following categories: research tools and methodologies (10 – 12 credits), courses in the student's major field of study (22 – 24 credits), and practice-focused elective courses (10 – 12 credits). Students must also successfully complete a capstone project, which will require two stages. The first stage is to propose a written project and present to a designated advisor and committee. The second stage is to complete the capstone project via a written and oral examination with the designated advisor and committee. The capstone project involves a substantial original research project that addresses a real-world problem in businesses or other organizations. The research project is designed to develop and demonstrate research skills that the candidate will utilize and build upon throughout their subsequent career.

DBA cohort sizes are expected to be 5-10 students per specialization. Cohorts should have a 3-year timeline to complete the program. The students applying for the DBA degree program should ideally possess a master's degree, either in Business, Economics, Engineering, or Sciences, although it is

not mandatory, and a Bachelor's degree will be considered under special circumstances. Applicants with a Bachelor's degree will be required to take additional coursework (12 credits at the master's level) or show relevant work experience in lieu of the coursework. The DBA program will be similar to other existing successful programs at Washington University in St. Louis, Case Western University, University of Florida, and Georgia State University. The program will be funded in part by tuition revenue and supporting funds from the Smith School. The Smith School, which also offers Master of Science programs in the three specialization areas, has the instructional and administrative resources to offer the program.

This proposal was approved by the Graduate School Programs, Curricula, and Courses committee on April 12, 2021, and the Senate Programs, Curricula, and Courses committee on May 7, 2021.

RECOMMENDATION(S)

The Senate Committee on Programs, Curricula, and Courses recommends that the Senate approve this new degree program.

COMMITTEE WORK

The committee considered this proposal at its meeting on May 7, 2021. Smith School Assistant Dean Rebecca Hann, Associate Dean P.K. Kannan, Assistant Dean Michael Marcellino, and Assistant Director Justina Blanco presented the proposal and answered questions from the committee. The proposal was approved by the committee.

ALTERNATIVES

The Senate could decline to approve this new degree program.

RISKS

If the Senate declines to approve this degree program, the university will lose an opportunity to provide a doctoral-level program for business leaders who seek to develop a more sophisticated knowledge of business theory, research methodology, and applications.

FINANCIAL IMPLICATIONS

Because this program is self-supported, there are no significant financial implications for this proposal.

669: DOCTORATE IN BUSINESS ADMINISTRATION

In Workflow

1. BMGT PCC Chair (bhorick@umd.edu; mmarcell@umd.edu)
2. BMGT Dean (ragar@umd.edu)
3. Academic Affairs Curriculum Manager (mcolson@umd.edu)
4. Justina Blanco (jblanco4@umd.edu)
5. Academic Affairs Curriculum Manager (mcolson@umd.edu)
6. Graduate School Curriculum Manager (aambrosi@umd.edu)
7. Graduate PCC Chair (aambrosi@umd.edu)
8. Dean of the Graduate School (sfetter@umd.edu; aambrosi@umd.edu)
9. Senate PCC Chair (mcolson@umd.edu; vorlando@umd.edu)
10. University Senate Chair (mcolson@umd.edu)
11. President (mcolson@umd.edu)
12. Board of Regents (mcolson@umd.edu)
13. MHEC (mcolson@umd.edu)
14. Provost Office (mcolson@umd.edu)
15. Graduate Catalog Manager (aambrosi@umd.edu)

Approval Path

1. Wed, 16 Oct 2019 16:24:54 GMT
   Michael Marcellino (mmarcell): Approved for BMGT PCC Chair
2. Wed, 30 Oct 2019 21:30:38 GMT
   Michael Colson (mcolson): Rollback to Initiator
3. Wed, 18 Dec 2019 13:51:44 GMT
   Brian Horick (bhorick): Approved for BMGT PCC Chair
4. Wed, 18 Dec 2019 14:46:46 GMT
   Ritu Agarwal (ragar): Approved for BMGT Dean
5. Thu, 30 Jan 2020 22:37:35 GMT
   Michael Colson (mcolson): Rollback to Initiator
6. Tue, 06 Oct 2020 20:17:47 GMT
   Brian Horick (bhorick): Approved for BMGT PCC Chair
7. Tue, 06 Oct 2020 20:49:24 GMT
   Ritu Agarwal (ragar): Approved for BMGT Dean
8. Mon, 23 Nov 2020 20:16:36 GMT
   Michael Colson (mcolson): Approved for Academic Affairs Curriculum Manager
9. Tue, 16 Feb 2021 15:58:38 GMT
   Justina Blanco (jblanco4): Approved for jblanco4
10. Wed, 24 Feb 2021 14:25:03 GMT
    Michael Colson (mcolson): Approved for Academic Affairs Curriculum Manager
11. Fri, 12 Mar 2021 14:50:56 GMT
    Angela Ambrosi (aambrosi): Rollback to jblanco4 for Graduate School Curriculum Manager
12. Wed, 24 Mar 2021 01:24:53 GMT
    Justina Blanco (jblanco4): Approved for jblanco4
13. Wed, 24 Mar 2021 15:12:05 GMT
    Michael Colson (mcolson): Approved for Academic Affairs Curriculum Manager
14. Wed, 07 Apr 2021 14:40:01 GMT
    Michael Colson (mcolson): Rollback to jblanco4 for Graduate School Curriculum Manager
15. Mon, 12 Apr 2021 13:39:23 GMT
    Justina Blanco (jblanco4): Approved for jblanco4
16. Mon, 12 Apr 2021 14:16:48 GMT
    Michael Colson (mcolson): Approved for Academic Affairs Curriculum Manager
17. Mon, 12 Apr 2021 16:02:49 GMT
    Angela Ambrosi (aambrosi): Approved for Graduate School Curriculum Manager
18. Mon, 12 Apr 2021 16:03:09 GMT

Angela Ambrosi (aambrosi): Approved for Graduate PCC Chair

19. Thu, 15 Apr 2021 12:03:26 GMT
    Steve Fetter (sfetter): Approved for Dean of the Graduate School
20. Sat, 08 May 2021 16:40:09 GMT
    Valerie Orlando (vorlando): Approved for Senate PCC Chair

New Program Proposal

Date Submitted: Tue, 06 Oct 2020 19:58:38 GMT

Viewing: 669 : Doctorate in Business Administration
Last edit: Mon, 12 Apr 2021 14:16:19 GMT

Changes proposed by: Justina Blanco (jblanco4)

Program Name

Doctorate in Business Administration

Program Status

Proposed

Effective Term

Fall 2021

Catalog Year

2021-2022

Program Level

Graduate Program

Program Type

Doctoral - Professional Practice

Delivery Method

On Campus

Departments

Department
The Robert H. Smith School of Business

Colleges

College
The Robert H. Smith School of Business

Degree(s) Awarded

Degree Awarded
Other

If other, new degree award:

Doctor of Business Administration

Proposal Contact

Rebecca Hann

Proposal Summary

The Smith Doctorate of Business Administration (DBA) is a practitioner-oriented professional doctoral-level degree designed for senior executives and researchers in industry and government in which advanced research skills in analyzing business problems are required. The DBA is an extended graduate study beyond a Master's degree with a focus on practical, applied research. The initial program concentration will focus on the areas of information systems, marketing, and finance, which are highlighted in this proposal as sample foci but other specializations in business will follow a similar format. The target of the program will be working professionals wishing to accelerate and solidify their careers as accomplished leaders in

business organizations and in government agencies using business and marketing analytics and/or focusing on financial market regulation or that have financial operations.

Cohort sizes are expected to be 5-10 students per specialization. Cohorts should have a 3-year timeline to complete the program. The DBA Degree requires 54 credits beyond a bachelor's degree or 30 credits beyond an approved master's degree for each specialization, which includes Research Tools & Methodologies, Major (specialization), practice-focused electives, and a capstone project. It is expected that 80% of enrolled students will already have a Master's degree. For the smaller percentage of enrolled students with only a Bachelor's degree, these students will be required to complete an additional 12 credits.

The program is intended to provide in-person instruction with optional blended style instruction. The program will accommodate full and part-time students with the course offerings during weekday evenings or on weekends. The program is designed so that students can complete the program in three years, however they could take longer depending on the time it takes for them to complete the required coursework. Each student in the Doctoral Program in Business Administration must have a Study Plan approved by the Program during the first year of the program, to be reviewed annually.

(PCC Log Number 20043)

Program and Catalog Information

Provide the catalog description of the proposed program. As part of the description, please indicate any areas of concentration or specializations that will be offered.

The Smith Doctorate of Business Administration (DBA) is a practitioner-oriented professional doctoral-level degree designed for senior executives and researchers in industry and government in which advanced research skills in analyzing business problems are required. The DBA is an extended graduate study beyond a Master's degree with a focus on practical, applied research. The target of the program will be working professionals wishing to accelerate and solidify their careers as accomplished leaders in business organizations and in government agencies using business and marketing analytics and/or focusing on financial market regulation or that have financial operations.

All students are required to complete a minimum of 54 credit hours beyond a bachelor's degree or 30 credit hours beyond a master's degree. Typically, students will take 42 credits in the following categories: Research Tools and Methodologies (10 – 12 credits), courses in the student's major field of study (22 – 24 credits), and practice-focused elective courses (10 – 12 credits). All students should take 12 credits of the capstone project research in addition to the coursework for graduation eligibility. In addition to passing each course, students are required to successfully pass their capstone project proposal before registering for the capstone project course. Finally, students must successfully complete their capstone project to graduate the program.

For those entering with a Master's degree, either in Business, Economics, Engineering or Sciences, the curriculum is a program with a set of pre-specified courses that provide rigorous content in the areas of information systems, marketing and finance, depending on the specialization. For those entering with only a Bachelor's degree in any area, there will be an additional 12 credits of coursework requirements. The program will accommodate part-time students with the course offerings during weekday evenings or on weekends. The program is designed so that students can complete the program in three years, however they could take longer depending on the time it takes for them to complete the required coursework. There is a maximum of 5 years to complete the program. Each student in the Doctoral Program in Business Administration must have a Study Plan approved by the Program during the first year of the program, to be reviewed annually.

Catalog Program Requirements:

All students are required to complete a minimum of 54 credit hours beyond a bachelor's degree or 30 credit hours beyond a master's degree. Typically, students will take 42 credits in the following categories: Research Tools and Methodologies (10 – 12 credits), courses in the student's major field of study (22 – 24 credits), and practice-focused elective courses (10 – 12 credits). All students should take 12 credits of the capstone project research in addition to the coursework for graduation eligibility. For those entering with only a Bachelor's degree in any area, there will be an additional 12 credits of coursework requirements. In addition to passing each course, students are required to successfully pass their capstone project proposal before registering for the capstone project course. Finally, students must successfully complete their capstone project to graduate the program.

The course listing below provides courses that meet the research tools and methodologies, major field of study, and practice-focused elective courses. Students are not required to take all of the courses listed nor are they limited to these courses. Some coursework is interdisciplinary in that students may take a course in another concentration to fulfill their specialization requirement. For example, BDBA820 Applied Microeconomics for Business can be used to complete the research tools and methodologies requirements of the Information Systems concentration and the Marketing (quantitative track) concentration. All course registration plans must be approved by the DBA Faculty Coordinator.

Course	Title	Credits
Research Tools & Methodologies		
INFORMATION SYSTEMS		
BDBA620	Course BDBA620 Not Found (Data Models and Decisions)	2
BDBA621	Course BDBA621 Not Found (Managerial Economics and Public Policy)	2
BDBA720	Course BDBA720 Not Found (Data Mining and Predictive Analysis)	2
BDBA820	Course BDBA820 Not Found (Applied Microeconomics for Business)	3
BDBA830	Course BDBA830 Not Found (Applied Multivariate Analysis)	2
FINANCE		
BDBA640	Course BDBA640 Not Found (Financial Econometrics I)	2

BDBA641	Course BDBA641 Not Found (Financial Econometrics II)	2
BDBA642	Course BDBA642 Not Found (Financial Mathematics)	2
BDBA643	Course BDBA643 Not Found (Financial Programming)	2
BDBA848(A-Z)	Course BDBA848(A-Z) Not Found (Special Topics in DBA in FIN)	1-4
MARKETING		
BDBA752	Course BDBA752 Not Found (Market-Based Management)	3
BDBA753	Course BDBA753 Not Found (Consumer Analysis)	3
BDBA754	Course BDBA754 Not Found (Statistical Programming)	3
BDBA755	Course BDBA755 Not Found (Marketing Research & Analysis)	3

Course	Title	Credits
Practice Focused Elective Courses		
INFORMATION SYSTEMS		
BDBA702	Course BDBA702 Not Found (Decision Analytics)	2
BDBA703	Course BDBA703 Not Found (Data Mining and Predictive Analysis)	2
BDBA708(A-Z)	Course BDBA708(A-Z) Not Found (Special Topics in DBA in Information Systems)	1-4
FINANCE		
BDBA747 (A-Z)	Course BDBA747 (A-Z) Not Found (Special Topics in DBA in FIN Asset Management)	1-4
BDBA748 (A-Z)	Course BDBA748 (A-Z) Not Found (Special Topics in DBA in FIN Corporate Finance)	1-4
MARKETING		
BDBA758(A-Z)	Course BDBA758(A-Z) Not Found (Special Topics in DBA in MKT)	1-4
BDBA857 (A-Z)	Course BDBA857 (A-Z) Not Found (Special Topics in DBA in MKT (CB))	1-4
BDBA858 (A-Z)	Course BDBA858 (A-Z) Not Found (Special Topics in DBA in MKT (Quant))	1-4

Course	Title	Credits
Major Field of Study Electives		
INFORMATION SYSTEMS		
BDBA600	Course BDBA600 Not Found (Strategic and Transformational IT)	2
BDBA601	Course BDBA601 Not Found (Managing Digital Business Markets)	2
BDBA701	Course BDBA701 Not Found (Project Management in Dynamic Environments)	2
BMGT801	Course BMGT801 Not Found (Research Methods in Information Systems)	2
BDBA802	Course BDBA802 Not Found (Institutions, Firms, and Collectives)	2
BDBA803	Course BDBA803 Not Found (Quality Transparency and the Value of Information Systems)	2
BDBA804	Course BDBA804 Not Found (Research in Strategy and IS I)	2
BDBA805	Course BDBA805 Not Found (Research in Strategy and IS II)	2
BDBA806	Course BDBA806 Not Found (Information Systems Economics I)	2
BDBA807	Course BDBA807 Not Found (Information Systems II)	2
BDBA808 (A-Z)	Course BDBA808 (A-Z) Not Found (Special Topics in DBA in Information Systems)	1-4
FINANCE		
BDBA644	Course BDBA644 Not Found (Financial Management)	2
BDBA645	Course BDBA645 Not Found (Advanced Capital Markets)	2
BDBA646	Course BDBA646 Not Found (Valuation in Corporate Finance)	2
BDBA647	Course BDBA647 Not Found (Derivative Securities)	2
BDBA740	Course BDBA740 Not Found (Applied Equity Analysis)	2
BDBA741	Course BDBA741 Not Found (Fixed Income Analysis)	2
BDBA742	Course BDBA742 Not Found (Portfolio Management)	2
BDBA743	Course BDBA743 Not Found (International Investment)	2
BDBA744	Course BDBA744 Not Found (Financial Strategy for Corporation)	2
BDBA745	Course BDBA745 Not Found (Corporate Governance and Performance)	2
BDBA746	Course BDBA746 Not Found (International Corporate and Project Finance)	2
BDBA840	Course BDBA840 Not Found (Seminar in Financial Theory)	3
BDBA841	Course BDBA841 Not Found (Seminar in Corporate Finance)	3
BDBA842	Course BDBA842 Not Found (Topics in Empirical Corporate Finance)	3
BDBA843	Course BDBA843 Not Found (Seminar in Asset Pricing)	3

MARKETING		
BDBA750	Course BDBA750 Not Found (Innovation and Product Management)	2
BDBA751	Course BDBA751 Not Found (Integrated Brand Management)	2
BDBA752	Course BDBA752 Not Found (Market-Based Management)	3
BDBA753	Course BDBA753 Not Found (Consumer Analysis)	3
BDBA754	Course BDBA754 Not Found (Statistical Programming)	3
BDBA755	Course BDBA755 Not Found (Marketing Research & Analysis)	3
BDBA756	Course BDBA756 Not Found (Advanced Marketing Analytics)	3
BDBA757	Course BDBA757 Not Found (Data Science)	3
BDBA850	Course BDBA850 Not Found (Seminar in Marketing Strategy)	2
BDBA851	Course BDBA851 Not Found (Seminar in Consumer Behavior)	3
BDBA852	Course BDBA852 Not Found (Seminar in Marketing Models)	3
BDBA853	Course BDBA853 Not Found (Seminar in Structural Models)	2
BDBA854	Course BDBA854 Not Found (Seminar in Analytical Models)	2
BDBA855	Course BDBA855 Not Found (Seminar in MCMC Estimation)	2
BDBA856	Course BDBA856 Not Found (Experimental Design)	2
Course	**Title**	**Credits**
Capstone Project		
BMGT829	Course BMGT829 Not Found (Capstone Project)	6

Sample plan. Provide a term by term sample plan that shows how a hypothetical student would progress through the program to completion. It should be clear the length of time it will take for a typical student to graduate. For undergraduate programs, this should be the four-year plan.

The Sample Plans listed below provide an example of how and when the courses will be offered per specialization. This is just an example as there are other courses available that students may choose to complete the requirements. Students will be required to complete a program plan and consult the DBA Faculty Coordinator.

Information Systems: Sample Coursework for Information Systems

Semester 1

BDBA830 Applied Multivariate Analysis 3 credits

BDBA820 Applied Microeconomics for Business 3 credits

BDBA601 Data Models and Decisions 2 credits

BDBA600 Strategic and Transformational IT 2 credits

Semester 2

BDBA801 Research Methods in Information Systems 2 credits

BDBA720 Data Mining and Predictive Analytics 3 credits BUSI 622 Managing Digital Businesses and Markets 2 credits

BDBA804 Research in Strategy and Information Systems - I 2 credits

BDBA805 Research in Strategy and Information Systems – II 2 credits

Semester 3

BDBA821 Data Science Research Seminar 2 credits

BDBA802 Institutions, Firms, and Collectives 2 credits

BDBA803 Quality Transparency and the Value of Information 2 credits

BDBA708(A-Z) Special Topics in DBA in Information Systems 1-4 credits

BDBA808(A-Z) Special Topics in DBA in Information Systems 1-4 credits

Semester 4

BDBA806 Information Systems Economics I 2 credits

BDBA807 Information Systems Economics II 2 credits

BDBA708(A-Z) Special Topics in DBA in Information Systems 1-4 credits

BDBA808(A-Z) Special Topics in DBA in Information Systems 1-4 credits

Semester 5

BDBA829 Capstone Project 6 credits

Semester 6

BDBA829 Capstone Project 6 credits

Marketing: Sample Coursework for Marketing

Semester 1

BDBA752 Market-Based Management 3 credits

BDBA753 Customer Analysis 3 credits

BDBA754 Statistical Programming 3 credits

BDBA758(A-Z) Special Topics in DBA in MKT 1-4 credits

Semester 2

BDBA755 Marketing Research and Analysis 3 credits

BDBA756 Advanced Marketing Analytics 2 credits

BDBA758(A-Z) Special Topics in DBA in MKT 1-4 credits

BDBA821 Data Science 3 credits

Semester 3

BDBA758(A-Z) Special Topics in DBA in MKT 1-4 credits

BDBA851 Seminar in Consumer Behavior 3 credits

BDBA852 Seminar in Marketing Models 3 credits

BDBA858(A-Z) Special Topics in DBA in MKT (Quant) 1-4 credits

Semester 4

BDBA758(A-Z) Special Topics in DBA in MKT 1-4 credits

BDBA850 Seminar in Marketing Strategy 3 credits

BDBA854 Seminar in Analytical Modeling 2 credits

BDBA858(A-Z) Special Topics in DBA in MKT (Quant) 1-4 credits

Semester 5

BDBA829 Capstone Project 6 credits

Semester 6

BDBA829 Capstone Project 6 credits

Finance: Sample Plan

Semester 1

BDBA640 Financial Econometrics I 2 credits

BDBA641 Financial Econometrics II 2 credits

BDBA645 Advanced Capital Markets 2 credits

BDBA747(A-Z) Special Topics in DBA in FIN Asset Management Track 1-4 credits

BDBA748(A-Z) Special Topics in DBA in FIN Corporate Finance Track 1-4 credits

Semester 2

BDBA643 Financial Programming 2 credits

BDBA646 Valuation in Corporate Finance 2 credits

BDBA740 Applied Equity Analysis 2 credits

BDBA741 Fixed Income Analysis 2 credits

BDBA848(A-Z) Special Topics in DBA in FIN 1-4 credits

Semester 3

BDBA742 Portfolio Management 2 credits

BDBA747(A-Z) Special Topics in DBA in FIN Asset Management Track 1-4 credits

BDBA840 Theory of Finance 3 credits

BDBA848(A-Z) Special Topics in DBA in FIN 1-4 credits

Semester 4

BDBA747(A-Z) Special Topics in DBA in FIN Asset Management Track 1-4 credits

BDBA843 Seminar in Asset Pricing 3 credits

BDBA848(A-Z) Special Topics in DBA in FIN 1-4 credits

Semester 5

BDBA829 Capstone Project 6 credits

Semester 6

BDBA829 Capstone Project 6 credits

List the intended student learning outcomes. In an attachment, provide the plan for assessing these outcomes.

Learning Outcomes
LEARNING OUTCOME 1 Students will demonstrate a clear understanding of the research tools and methodologies for research investigation and analysis.
LEARNING OUTCOME 2 Students will demonstrate a clear understanding of foundational topics and analysis techniques.
LEARNING OUTCOME 3 Students will demonstrate a clear understanding of analytical skills applied to business problems.
LEARNING OUTCOME 4 Students will demonstrate their ability to apply foundational theories and quantitative research methods and practice-oriented skills to a business research problem.

New Program Information

Mission and Purpose

Describe the program and explain how it fits the institutional mission statement and planning priorities.

The Robert H. Smith School of Business proposes (re)launching the Doctorate of Business Administration (DBA) program. It is designed to provide working professionals with a rigorous understanding of and the ability to apply state-of-the-art developments in applied business research to the challenges confronting their organizations. This program's mission is to offer an excellent professional graduate program that is nationally recognized for their contributions to the practice of the professions, for their pioneering curricula, and for their spirit of innovation and creativity.

With the rapid developments in technology, evolution of big data and artificial intelligence, machine learning techniques, impacting traditional and digital marketplaces and leading to innovative business and financial models, there is a growing demand for senior executives who have a deep understanding of these developments and apply it in practice. The University of Maryland, College Park mission statement sets a goal to “continue to build a strong, university-wide culture of graduate and professional education” and to provide knowledge-based programs and services that are responsive to the needs of the citizens of the state and the nation. The Robert H. Smith School of Business houses one of the strongest academic faculties in the world and regularly places in the Top 15 in the Financial Times Rankings of “Top Professional Research Institutions in Business.” The research and experience of the faculty are particularly suited to attract some of the brightest executives in the world who are seeking a more thorough understanding of business analytics, marketing technology (martech), finance technology (fintech) and associated business, marketing and financial issues and their global implications. Faculty and staff currently affiliated with the Robert H. Smith School of Business hold appropriate degrees in economics, statistics, marketing, finance, information systems, management, and public policy that are relevant and necessary for the Doctorate of Business Administration degree.

Difference between the proposed DBA and current PhD and MBA programs:

Our current PhD program trains students to become scholars, continue to do full-time research, publish papers, teach courses and become full-time professors. The PhD program is aimed at training students to create new theory and methodologies in their respective areas of research, by identifying gaps in knowledge and fill those gaps with their research work. In contrast, the DBA program is focused on training students to combine research with concrete business problems. It is less focused on extending existing theories, rather focuses on applying existing theories to explain specific problems, which typically arise in the companies where students work. To this end, the DBA capstone project could use a case-study approach instead of an empirical research approach. In short, the DBA capstone project centers around a practical problem from the business world that is deemed relevant from both sides, business managers as well as scholars. Such projects are not part of our MBA program, which trains students to be successful managers. In contrast, the DBA students would be individuals who have already achieved success in business for some time and seek a new intellectual challenge. They may already have an MBA degree and want to further distinguish themselves through research. This population is very different from the students we have in our current PhD program, who are younger in age and generally lack business experience. Therefore, the focus of the DBA program is to train mature business professionals in research methodology, helping them identify important practical business problems and relevant data, in order to solve those problems presented in their DBA capstone project. Graduates of the DBA program will leave with advanced knowledge and the skilled perspective to generalize approaches to situations beyond the current context, at times even applying or publishing the research for industry. DBA graduates may continue in their current employment with promotion using the high degree attainment to climb their company’s hierarchy. Because of their degree status and work experience, DBA graduates may be called upon to give guest lectures, adjunct teaching or publish in practitioner or academic journals. Thus, objectives of the DBA program go far beyond that of our MBA program.

The design of the Smith DBA is similar to a number of other peer university programs such as Washington University at St. Louis, University of Florida, Case Western University, Temple University, and Rutgers University in that the focus of the program is on practitioners/executives with significant experience in industry with an objective to graduate practitioner-scholars. The rise in such programs is another indication of the need for such programs among practitioners. Our program is different from the DBA program offered in Harvard University which does not make the distinction between practitioners and others. The comparison of our program with other major DBA programs across different dimensions is provided in an appendix (6_DBA Benchmark Data).

In terms of the number of credit hours required, the Smith DBA program is in the middle of the range (30-60 credits) with 54 credits beyond a bachelor's degree or 30 credits beyond a master's degree. One of the unique aspects of the Smith DBA is the inclusion of practice-oriented courses in each of the program areas as it provides significant opportunities for taking practice-oriented courses, which is not as evident in the other programs. Comparison of the DBA curriculum to the PhD curriculum is provided in the appendix. (2_Curriculum Comparison).

Program Characteristics

What are the educational objectives of the program?

The proposed DBA program offered by the Robert H Smith School of Business will provide students with programmatic skill sets in the following:

a) Comprehensive knowledge of foundational concepts in the respective concentration areas – information systems, marketing and finance.

b) Analytical skills in the respective concentration areas - information systems, marketing and finance.

c) The competency necessary to take leadership roles in business and financial organizations with global reach.

d) Knowledge of the legal and ethical issues related to big data management, privacy preservation, marketing research, financial management and an understanding of the role of all stakeholders when capital allocation decisions are made.

INFORMATION SYSTEMS: Educational Objectives

1) Comprehensive knowledge and analytical skills including data mining and prediction models, decision analytics, big data and artificial intelligence, social media and web analytics, market segmentation, etc.

2) The ability to leverage emerging technologies including artificial intelligence, Internet of things, and novel sources of mobile and social data to develop agile businesses strategies and inform policy.

3) Understanding of foundational theory and practical application of information systems topics.

MARKETING: Educational Objectives

1) Comprehensive knowledge and analytical skills including data mining and prediction models, decision analytics, social media and web analytics, market segmentation, marketing mix models, personalization and recommendations, attribution modeling, etc.

2) Using behavioral theories to understand users' as well as customers' motivation, attitudes and behaviors and make behavioral predictions.

3) Understanding of foundational theory and practical application of marketing behavioral and quantitative topics.

FINANCE: Educational Objectives

1) Comprehensive knowledge and analytical skills including financial products and financial market structure, detailed financial modeling, the ability to design and empirically estimate financial relationships and creation of financial statements and forecasts.

2) An understanding of the regulatory structure of financial markets and the role that policymakers and regulators play in the efficient operation of financial markets.

3) Understanding of foundational theory and practical application of finance topics.

Describe any selective admissions policy or special criteria for students interested in this program.

Admission is for the Fall semester only. Applicants must meet the following minimum admission criteria as established by the Graduate School:
• Applicants must have earned a four-year baccalaureate degree from a regionally accredited U.S. institution, or an equivalent degree from a non-U.S. institution.
• Applicants must have earned a 3.0 GPA (on a 4.0 scale) in all prior undergraduate and graduate coursework.
• Applicants must provide an official copy of a transcript for all of their post-secondary work.
• International applicants must fulfill all requirements relating to international academic credentials, evidence of English proficiency, financial certification, and visa documentation.

Applicants must fulfill the Smith DBA admission requirements:
• Applicants must have a bachelor's degree, but master's degrees are preferred.
• Official transcripts for all post-secondary work.
• Three letters of recommendations that address the applicant's academic capabilities and probability of success in a doctoral program.
• Statement of Goals and Interests.
• Resume or CV.

The students applying for the DBA degree program should ideally possess a Master's degree, either in Business, Economics, Engineering or Sciences, although it is not mandatory and a Bachelor's degree will be considered under special circumstances. Applicants with a Bachelor's degree will be required to take additional coursework (12 credits at the master's level) or show relevant work experience in lieu of the coursework. The DBA admittance committee will make the final determination on additional coursework requirements.

Post-Masters students who are practicing senior managers may enroll in the Doctoral Program in Business Administration on either a full-time or a part-time basis. Classes will be offered on weekday evenings and/or weekends to accommodate all students.

All students will be required to complete the core requirements in their concentration area, research tools and methodology courses, practice-focused electives and the final capstone project.

Summarize the factors that were considered in developing the proposed curriculum (such as recommendations of advisory or other groups, articulated workforce needs, standards set by disciplinary associations or specialized-accrediting groups, etc.).

The Association to Advance Collegiate Schools of Business (AACSB), the highest accreditation body for business schools, highlighted the following in their report of the AACSB International Doctoral Education Task Force (2013): "Today's evolving faculty models increasingly are incorporating industry engagement and the production of research that bridges the academia-practice divide…Skills refined through doctoral education, such as problem framing and data analysis, are increasingly valued in certain professional roles and industry circles."

The report further highlights the growing need for professional doctoral education with this following call: "New doctoral education models that are emerging collectively serve a broader range of career paths and research outcomes, thus expanding the capabilities and employability of doctoral graduates. The trend should be encouraged." The demand estimates for such graduates are also increasing as evidenced in the job postings and the industry trend reports appended to this proposal (8_Industry Trends).

Therefore, the program is structured to provide a higher skill set in regards to leadership and problem-solving than one would earn in a Master's degree, but provide a more practical application approach than a doctor of philosophy program would provide to working professionals. The major courses will introduce a combination of foundation theories and practical applications. The methodology courses will build the analytical skills necessary to construct, compute, and analyze problems and results. Practice-focused courses will continue bridging the foundational theories with the practical applications but will focus more on the latter and allow for flexibility to encompass the trending business administration practices. The capstone project will allow individuals to investigate a real-world topic or issue by applying foundational theories and practical applications within the proper measurements.

Select the academic calendar type for this program (calendar types with dates can be found on the Academic Calendar **(**https://www.provost.umd.edu/calendar/**) page)**

Traditional Semester

Identify specific actions and strategies that will be utilized to recruit and retain a diverse student body.

The Robert H. Smith School of Business community is multifaceted at every level – students, staff and faculty represent a diverse blend of backgrounds, nationalities, ethnicities and experiences. To attract the most diverse population possible for the proposed DBA program, Smith School recruiting staff will focus on identifying leaders from a variety of industries and geographic locations, employing many of the same strategies that have generated significant diversity in our MBA and Executive MBA programs. For example, our faculty and students work with liaisons at companies such as Oracle, Security Exchange Commission, IMF, etc. These are valuable companies that serve as data resources. The Doctor of Philosophy program is focused on an academic career path, whereas the Doctor of Business Administration program would be a valuable and highly reputable degree for many of these liaisons and companies.

Currently, the Doctoral Program Office participates in recruitment at The PhD Project. The PhD Project was founded by KPMG, CITI AACSB and GMAC. This organization is specific to propelling workplace diversity by increasing diversity of business schools specifically. The program introduces underrepresented minorities to doctoral programs in business with focus on research, teaching, and executive DBA programs. Additionally, The PhD Project continues support and resources with individuals as they become students in doctoral programs and later as faculty or executives in industry. This would be a great source for recruitment and retainment specifically to diversify not just the program population but also leaders in industry with doctoral education.

Please describe the Post-Coursework or Mid-Program Evaluation component of this program.

Mid-Program Evaluation (all programs, all tracks):
The DBA program is a 3-year program. The progress in the program will be evaluated at 3 main phases in the program.

1. At the end of the first-academic year, the students need to maintain a GPA of 3.0 in the courses that they have taken in the first year, to continue in the program. A GPA of less than 3.0 would lead to a 6-month probationary period. If after the 6 months, the student fails to improve the GPA then the student will be counseled from the program. This is in compliance with the UMD Graduate School policy for "good standing".
2. At the end of second year with the completion of all coursework, the students need to have a GPA of 3.25 to continue to the capstone project stage. Students with a GPA less than 3.25 would be evaluated by a faculty committee on their continuance in the program. Ultimately, students must maintain a 3.25 GPA to continue to the Capstone project stage is a program requirement. This is in compliance with the UMD Graduate School policy for "satisfactory progress."

3. Evaluation of the capstone project proposal: Students need to propose their capstone project, which should be scheduled during the first semester of the third year, earlier in the semester than later. Upon successful proposal, the students can continue their project towards completion. The criteria for the capstone project proposal and the completed project are described later in this section.

4. Students who are not able to continue in the program at the end of the second-year or are unable to successfully propose the capstone project will be offered a master's degree in the general business and management specialization (MS in Business & Management). Eligibility for specialty Master's (in business concentrations) will be evaluated by the Smith School Master's Program Office and approved by the University of Maryland Graduate School. Courses must be successfully completed (passing grade B- or higher) and satisfy the requirements on file with the University of Maryland and MHEC.

Please provide examples of how students might fulfill the Doctoral Capstone requirement.

The DBA program requires two stages of the capstone project. The first stage is to propose a written project and present to a designated advisor and committee. The second stage is the final stage which is the completed capstone project via a written and oral examination with the designated advisor

and committee. The capstone project involves a substantial original research project that addresses a real-world problem in business or government. The research is designed to develop and demonstrate research skills which the candidate will utilize and build upon throughout their subsequent career. Close working relationships with committee members and pursuit of relevant data, research methodologies, and literature are essential aspects of a successful research project. Preparation of the final document is just one of several requirements of the capstone research project. Committee selection, topic selection, data collection, design and conduct of research, highlighting implications of the research for industry are other large and critical aspects of the capstone project.

This project will generally include:

• Identification of a real-world business problem that will constitute the primary focus of the research.
• Explanation of the subject of the research, including its connection with the current state of knowledge and prior literature.
• Demonstration of the methodologies used in the research, including the appropriateness of the method to deal with the subject.
• Description of the data to be utilized in the research.
• Additional content and supporting materials as determined by the chair and the committee members.

Evaluation of the Capstone Project:
1. The first stage evaluation of the capstone project is through the capstone project proposal. The student works closely with the DBA committee chair and other committee members (one of whom could include an executive from the student's context/place of the project) to prepare the capstone project proposal. The document will generally include:
a. Identification of a real-world business problem that will constitute the primary focus of the research.
b. Explanation of the subject of the research, including its connection with the current state of knowledge and prior literature.
c. Demonstration of the methodologies used in the research, including the appropriateness of the method to deal with the subject.
d. Description of the data to be utilized in the research.
e. Additional content and supporting materials as determined by the chair and the committee members.

When a proposal draft is ready, the candidate should designate their research committee and schedule their proposal presentation.

The criteria for evaluating the project will include (1) the importance of the problem and the potential impact for practice, (2) potential for implementation of the solutions arising from the research (2) the generalizability of the intended research for different practical applications, (3) the fidelity of the research methodologies and design, (4) completeness and suitability of the data, (5) the likelihood of completing the project on time given the scope, and (6) whether proposal demonstrates research skills which the candidate will utilize and build upon throughout their subsequent career.

Based on the above criteria, the committee could suggest revisions to the project proposal. If the proposal does not meet the standards and cannot be revised within a reasonable timeframe (3 months), the committee would render an evaluation of "fail" and counsel the student from the program.

2. The final capstone project will require the student to work closely with the DBA committee to ensure it is on track for a successful completion. Necessary conditions for a successful project involve evidence of either actual implementation of the solution derived from the research or potential for near-term implementation of the project, a written report outlining the project problem, research design and methodologies, findings/results, plan for implementation, and a highlight of implications of the research for the industry, all of which should evidence high attainment in professional practice. The students will also defend their project orally in front of the committee.

Relationship to Other Units or Institutions

If a required or recommended course is o#ered by another department, discuss how the additional students will not unduly burden that department's faculty and resources. Discuss any other potential impacts on another department, such as academic content that may significantly overlap with existing programs. Use space below for any comments. Otherwise, attach supporting correspondence.

None at this time.

Accreditation and Licensure. Will the program need to be accredited? If so, indicate the accrediting agency. Also, indicate if students will expect to be licensed or certified in order to engage in or be successful in the program's target occupation.

The Robert H. Smith School of Business is accredited with the Association to Advance Collegiate Schools of Business. The Smith School of Business will follow the appropriate steps to list the DBA accordingly. It is not expected that graduates of the DBA program will require any additional certifications. Once the program has been launched, it will be submitted for accreditation by the American Association of Collegiate Business Schools (AACSB) that accredits all business school programs. All the other degree programs offered at the Smith School of Business are AACSB accredited.

Describe any cooperative arrangements with other institutions or organizations that will be important for the success of this program.

None. The program is fully contained and delivered within the Smith School of Business.

Faculty and Organization

Who will provide academic direction and oversight for the program? In an attachment, please indicate the faculty involved in the program. Include their titles, credentials, and courses they may teach for the program.

The DBA program will fall under the Assistant Dean of Doctoral Program, which requires tenured and full professor credentials and follows a 3-year term with option to renew as approved by the Dean of the Smith School of Business. Each area of concentration (Marketing, Finance, and Information

Systems) would have a faculty coordinator that would oversee the students in the area of specialization as well as serve on an oversight committee guided by the Assistant Dean of Doctoral Program. These coordinator positions would be a minimum of 2 years.

Currently, Rebecca Hann, Professor of Accounting and Information Assurance, serves as the Assistant Dean of Doctoral Program. P.K. Kannan, Dean's Chair in Marketing Science will serve as faculty coordinator for the Marketing area of specialization. Mark Loewenstein, Associate Professor of Finance will serve as faculty coordinator for the Finance area of specialization. Siva Viswanathan, Professor of Information Systems, will serve as faculty coordinator for the Information Systems area of specialization.

Indicate who will provide the administrative coordination for the program

In regard to the administrative coordination, the DBA program will utilize several current offices within the Smith School of Business. The Smith School of Business currently has a PhD Office staffed with a coordinator, assistant director, and assistant dean. Depending on the demands of the program, the Smith School may allocate staff and resources from the Master's Program Office and Executive Education Office. These offices currently have staff whose talent may be best to assist with the demands of the DBA program.

Resource Needs and Sources

Each new program is required to have a library assessment prepared by the University Libraries in order to determine any new library resources that may be required. This assessment must be done by the University Libraries. Add as an attachment.

Please see appendix (4_Collection Assessment).

Discuss the adequacy of physical facilities, infrastructure and instructional equipment.

The Smith School has access to excellent resources and facilities for this program. There are sufficient classrooms and conference rooms to accommodate the cohorts. The rooms provide all the technology required including PowerPoint, recordings, doc cameras, etc.

Discuss the instructional resources (faculty, staff, and teaching assistants) that will be needed to cover new courses or needed additional sections of existing courses to be taught. Indicate the source of resources for covering these costs.

As provided in appendix (1_DBA Course Number Updates), 70% of the courses already exist and will be cross-listed with the BDBA course number. This will aid in tracking the DBA participants and distribution of any instructional costs and shared budgets. Supervision by faculty for the coordinator positions and adviser roles would be part of the teaching and research commitment. This would not be viewed as a separate allocation of workload on the faculty.

About 1/3 of courses will be created for the DBA program, which is are special topics for each area of specialization and the capstone project courses. BDBA829 will be the Capstone Project course. The special topic courses include: BDBA857 (A-Z), BDBA858 (A-Z), BDBA747 (A-Z), BDBA748 (A-Z), and BDAB708 (A-Z). These courses may change over time to reflect the current trends in real world business applications.

In the beginning, cohort sizes are envisioned to be rather small (5 students per specialization). As the cohort sizes grow, the Smith School of Business would cover the additional costs needed via the generated revenue.

Discuss the administrative and advising resources that will be needed for the program. Indicate the source of resources for covering these costs.

In regards to the administrative resources, the DBA program will utilize several current offices within the Smith School of Business. The Smith School of Business currently has a PhD Office staffed with a coordinator, assistant director, and assistant dean. Depending on the demands of the program, the Smith School may allocate staff and resources from the Master's Program Office and Executive Education Office. These offices currently have staff whose talent may be best to assist with the demands of the DBA program.

In terms of advising, the DBA faculty coordinator (as described above) will be responsible for the majority of advising. Other faculty involved with the courses and specialization may also advise and/or participate on capstone project committees. These resources will be calculated similar to that of the PhD Program in that advising is a component of their teaching and research commitments and not a separate work load.

Use the Maryland Higher Education Commission (MHEC) commission financial tables to describe the program's financial plan for the next five years. See help bubble for financial table template. Use space below for any additional comments on program funding.

Attached is the appendix (5_DBA Budget Sheet).

Implications for the State (Additional Information Required by MHEC and the Board of Regents)

Explain how there is a compelling regional or statewide need for the program. Argument for need may be based on the need for the advancement of knowledge and/or societal needs, including the need for "expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education." Also, explain how need is consistent with the Maryland State Plan for Postsecondary Education **(**https://mhec.state.md.us/About/Documents/2017.2021%20Maryland%20State%20Plan%20for%20Higher%20Education.pdf**).**

The DBA program fits State of Maryland's mission of offering excellent professional graduate programs that are nationally recognized for their contributions to the practice of the professions, for their pioneering curricula, and for their spirit of innovation and creativity With the rapid developments in technology, evolution of big data and artificial intelligence, machine learning techniques, impacting traditional and digital marketplaces and leading to innovative business and financial models, there is a growing demand for senior executives who have a deep understanding of these developments and apply it in practice. The University of Maryland College Park mission statement sets a goal to "continue to build a strong, university-wide culture of graduate and professional education" and to provide knowledge-based programs and services that are

responsive to the needs of the citizens of the state and the nation. The DBA program focuses on developing application-oriented research skills that students can use in their practice-based careers against a doctoral program which prepares students to conduct fundamental research and publish papers. The skills that are taught in the DBA program go beyond those taught in the MBA program or in any of the specialized Master's program in business. Seminar courses are specifically designed for the DBA students that provide application-oriented skills in their respective disciplines culminating in a practice-oriented capstone project that integrates students' learnings in the various DBA-specific courses. The DBA program is positioned similar to the other existing successful programs in Washington University at St. Louis, Case Western University, University of Florida, and Georgia State University.

Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program. Possible sources of information include industry or disciplinary studies on job market, the USBLS Occupational Outlook Handbook **(**https://www.bls.gov/ooh/**), or Maryland state** Occupational and Industry Projections **(**http://www.dllr.state.md.us/lmi/iandoproj/**) over the next five years. Also, provide information on the existing supply of graduates in similar programs in the state (use MHEC's Office of Research and Policy Analysis** webpage (http://mhec.maryland.gov/publications/Pages/research/**) for Annual Reports on Enrollment by Program) and discuss how future demand for graduates will exceed the existing supply. As part of this analysis, indicate the anticipated number of students your program will graduate per year at steady state.**

The Bureau of Labor Statistics (1) indicates that District of Columbia and Virginia are two of the top states in the US employing management level positions with annual wages in the six figures. Additionally, the bureau of statistics indicates that the "Washington-Arlington-Alexandria, DC-VA-MD-WV" is one of the top metro areas for employing management level positions again with a six-figure annual wage.

This is further highlighted by a 2016 report "Trends in Workforce Demand" conducted by the Metropolitan Washington Council of Governments(2). This report charts the job growth in the Metropolitan Washington DC area as well as compares to the national averages of job growth. Most specifically, the DC/MD/VA region has seen a 14% job growth rate in Education and Health Services and 6% growth rate in both Professional and Business Services and Trade, Transportation and Utilities. By specifically drilling down the Professional and Business Services industry cluster, we see growth specifically in the Management, Scientific and Technical Consulting Services. It further shows that the top industries in the DC/MD/VA area are Accenture, Booz Allen Hamilton, and Deloitte. These companies are specifically known to prefer individuals with PhD's or DBA's for their executive and top research positions.

The DBA will focus on three areas of specialization that reflect these same job growth trends in the DC/MD/VA. The Finance specialization will provide the skill set required by not only the top industries identified above but also by the highly regarded employers at the IMF, Cornerstone Research, World Bank, and the Federal Reserve Board. The Information Systems area of specialization would provide individuals with business analytics expertise and expand on project management training. These skills are specifically regarded by companies such as Booz Allen Hamilton. The Marketing area of specialization will also expand on marketing analytics and consumer behavior within an industry and management perspective. With the development of Amazon's H2Q coming to the Washington DC area metro, we anticipate that these skills in all three areas of specializations will be highly coveted. Employers may even work with their current employees in sponsorship of the DBA education.

(1) https://bls.org/ooh
(2) https://wtop.com/wp-content/uploads/2016/05/312455432-The-Trends-in-Workforce-Demand-Report-by-the-Metropolitan-Washington-COG.pdf

Identify similar programs in the state. Discuss any di#erences between the proposed program and existing programs. Explain how your program will not result in an unreasonable duplication of an existing program (you can base this argument on program di#erences or market demand for graduates). The MHEC website can be used to find academic programs operating in the state: http://mhec.maryland.gov/institutions_training/pages/HEPrograms.aspx

University of Maryland, Global Campus offers a Doctor of Management (professional practice) with the reputation of catering to the working professional. The Doctor of Management is typically arranged to enable individuals to teach in academia as clinical faculty and/or obtain leadership positions. The Smith School of Business will offer a Doctor of Business Administration, which offers a more holistic education in applied research with careers in teaching, analysis, and management and not just focused on leadership and teaching. The Smith School of Business is accredited with the AACSB, which provides a nationally recognized distinction. In addition to reviewing MHEC's website, we reviewed the list of DBA or Doctor of Management programs provided by the AACSB. The list demonstrates a nationwide demand for the DBA program. The Smith School of Business would be the only AACSB accredited DBA program in Maryland.

Discuss the possible impact on Historically Black Institutions (HBIs) in the state. Will the program affect any existing programs at Maryland HBIs? Will the program impact the uniqueness or identity of a Maryland HBI?

We have recognized that Morgan State University offers a PhD in Business and Administration. However, the primary goals of both programs do not seem to be aligned. Morgan State University's PhD in Business and Administration focuses on those interested in teaching in higher education and may be more aligned with Smith's PhD in Business and Management program, while Smith's DBA program would be focused on practical application for industry rather than academics. We have attached a brief comparison of the programs (7_Key Differences Smith DBA vs Morgan PHD).

Supporting Documents

Attachments

1_DBA Courses Number Updates.xlsx
7_Key Differences Smith DBA vs Morgan PhD .docx
9_Response to PCC Questions on Smith DBA March 2021.docx
8_Industry Analysis for DBA.docx

6_DBA Benchmark Data.xlsx
5_DBA Budget Sheet.xlsx
4_Collection_Assessment_DBA.docx
3_Learning Outcomes.docx
2_Curriculum Comparsion.xlsx
10_DBA Faculty.xlsx

Reviewer Comments

Michael Colson (mcolson) (Wed, 30 Oct 2019 21:30:38 GMT): Rollback: Returning at college's request.

Michael Colson (mcolson) (Thu, 30 Jan 2020 22:37:35 GMT): Rollback: Returning for updates.

Angela Ambrosi (aambrosi) (Fri, 12 Mar 2021 14:50:56 GMT): Rollback: Edits needed

Michael Colson (mcolson) (Wed, 07 Apr 2021 14:40:01 GMT): Rollback: Rolling back to allow for more revisions.

Key: 669

Course Course	BDBA Tentative Labels
600-607	Information Systems
608	Special Topics in Information Systems
610-617	Accounting
618	Special Topics in Accounting
620-627	General DBA
628	Special Topics in General DBA
630-637	Operations Management/Management Science Courses
638	Special Topics in Operations Management/Management Science Coursese
640-647	Finance
648	Special topics in Finance
650-657	Marketing
658	Special Topics in Marketing
660-667	Organizational Behavior/Human Resource Management
668	Special Topics in Organizational Behavior/Human Resource Management
670-677	Strategic Management & Entrepreneurship
678	Special Topics in Strategic Management & Entrepreneurship
680-687	Supply Chain Management
688	Special Topics In Supply Chain Management
690-697	General DBA
698	Special Topics in General DBA
700-707	Information Systems
708	Special Topics in Information Systems
710-717	Accounting
718	Special Topics in Accounting
720-727	General DBA
728	Special Topics in General DBA
730-737	Operations Management/Management Science Courses
738	Special Topics in Operations Management/Management Science Coursese

740-747	Finance
748	Special topics in Finance
750-757	Marketing
758	Special Topics in Marketing
760-767	Organizational Behavior/Human Resource Management
768	Special Topics in Organizational Behavior/Human Resource Management
770-778	Strategic Management & Entrepreneurship
778	Special Topics in Strategic Management & Entrepreneurship
780-787	Supply Chain Management
788	Special Topics In Supply Chain Management
790-797	General DBA
798	Special Topics in General DBA
799	Capstone
800-807	Information Systems
808	Special Topics in Information Systems
810-817	Accounting
818	Special Topics in Accounting
820-827	General DBA
828	Independent Study in DBA
830-837	Operations Management/Management Science Courses
838	Special Topics in Operations Management/Management Science Coursese
840-847	Finance
848	Special topics in Finance
850-857	Marketing
858	Special Topics in Marketing
860-867	Organizational Behavior/Human Resource Management
868	Special Topics in Organizational Behavior/Human Resource Management
870-878	Strategic Management & Entrepreneurship
878	Special Topics in Strategic Management & Entrepreneurship
880-887	Supply Chain Management

888	Special Topics In Supply Chain Management
890-897	General DBA
898	Special Topics in General DBA
829	Capstone Project

Course #	Course Title	Course Credits	Cross-Referenced to	Meets Requirements:	Notes	Course content:	New Number	Notes
BDBA829	Capstone Project	6.00		Capstone				
BDBA600	Strategic and Transformational IT	2.00	BUSI621	Major in IS (Topical)				
BDBA601	Managing Digital Business Markets	2.00	BUSI622	Major in IS (Topical)				
BDBA701	Project Management in Dynamic Environments	2.00	BUSI785	Major in IS (Topical)				
BDBA801	Research Methods in Information Systems	2.00	BMGT808O	Major in IS (Topical)				
BDBA802	Institutions, Firms, and Collectives	2.00	BMGT808J	Major in IS (Topical)				
BDBA803	Quality Transparency and the Value of Information	2.00	BMGT808K	Major in IS (Topical)				
BDBA804	Research in Strategy and IS I	2.00	BMGT808V	Major in IS (Topical)				
BDBA805	Research in Strategy and IS II	2.00	BMGT808W	Major in IS (Topical)				
BDBA806	Information Systems Economics I	2.00	BMGT808D	Major in IS (Topical)				
BDBA807	Information Systems Economics II	2.00	BMGT808E	Major in IS (Topical)				
BDBA808(A-Z)	Special Topics in DBA in Information Systems	1-4		Major in IS (Topical)				
BDBA821	Data Science Research Seminar	2.00	BMGT808Q	Major in IS (Topical)				
BDBA702	Decision Analytics	2.00	BUDT732	Practice Focused				
BDBA708(A-Z)	Special Topics in DBA in Information Systems	1-4	See Notes	Elective	BUDT758D Big Data and Artificial Intelligence in Business, BUDT758L Applied Finance Information Systems, BUDT758M			
BDBA620	Data Models and Decisions	2.00	BUSI630	Research Tools & Methodologies				
BDBA621	Managerial Economics and Public Policy	2.00	BUSI681	Research Tools & Methodologies				
BDBA720	Data Mining and Predictive Analysis	2.00	BUDT733	Research Tools & Methodologies				
BDBA820	Applied Microeconomics for Business	3.00	BMGT808G	Research Tools & Methodologies		This course covers research methods from economics that have proved to be useful in business disciplines. Students will develop an understanding of how		
BDBA830	Applied Multivariate Analysis	2.00	BMGT837	Research Tools & Methodologies				
BDBA608	Special Topics in DBA in Information Systems	1-4						

This course is typically offered as BUDT758Q for 3 credits for MSIS students. It will get a new number but will likely still be 3 credits.

Course #	Course Title	Course Credits	Cross-Referenced to	Meets Requirements Notes	Course content:	New Number	Notes
BDBA750	Innovation and Product Management	2.00	BUSM706	Major in MKT			
BDBA751	Integrated Brand Management	2.00	BUSM714	Major in MKT			BUSM714 is titled Market Forecasting
BDBA752	Market-Based Management	3.00	BUMK758B	Research, Tools & Methodology			BUMK758B has been changed to BUMK757 but the title is Marketing Strategy
BDBA753	Consumer Analysis	3.00	BUMK758D	Research, Tools & Methodology			BUMK758D has been changed to BUMK720 but is titled Marketing Strategy and is only 2 credits. There is a 2 credit BUMK715 that is titled Consumer Behavior.
BDBA754	Statistical Programming	3.00	BUMK758E	Research, Tools & Methodology		BUMK726	
BDBA755	Marketing Research & Analysis	3.00	BUMK758L	Research, Tools & Methodology		BUMK744	
BDBA756	Advanced Marketing Analytics	3.00	BUMK758K	Major in MKT* (Topics)		BUMK742	
BDBA757	Data Science	3.00	BUMK758W	Major in MKT* (Topics)		BUMK746	
BDBA758	Special Topics in DBA in MKT	1-4		Various Doctoral Electives	BUSM7581 Digital Marketing and Web Analytics, BUMK7582 Health Analytics and Strategies, BUMK758A Market Forecasting		
BDBA829	Capstone	6.00		Capstone			
BDBA850	Seminar in Marketing Strategy	2.00	BMGT858L	Major in MKT (Topics)			
BDBA851	Seminar in Consumer Behavior	3.00	BMGT858C	Major in MKT (Topics)			
BDBA852	Seminar in Marketing Models	3.00	BMGT858P	Major in MKT (Topics)			
BDBA853	Seminar in Structural Models	2.00	BMGT858J	Major in MKT* (Topics)			
BDBA854	Seminar in Analytical Models	2.00	BMGT858G	Major in MKT* (Topics)			
BDBA855	Seminar in MCMC Estimation	2.00	BMGT858W	Major in MKT* (Topics)			
BDBA856	Experimental Design	2.00	BMGT858E	Major in MKT* (Topics)			
BDBA857 (A-Z)	Special topics in DBA in MKT (CB)						
BDBA858(A-Z)	Special topics in DBA in MKT (Quant)	1-4		Major in MKT (Topics)			

Course #	Course Title	Course Credits	Cross-Referenced to	Meets Requirements? Notes	Course content:	New Number	Notes
BDBA829	Capstone	6.00		Capstone			
BDBA644	Financial Management	2.00	BUFN610	Major			
BDBA645	Advanced Capital Markets	2.00	BUFN741	Major			
BDBA646	Valuation in Corporate Finance	2.00	BUFN750	Major		BUFN630	
BDBA647	Derivative Securities	2.00	BUFN660	Major			
BDBA840	Seminar in Financial Theory	3.00	BMGT840	Major			
BDBA848(A-Z)	Special topics in DBA in FIN	1-4		Major in MKT (Topics)			
BDBA740	Applied Equity Analysis	2.00	BUFN760	Major*		BUFN730	
BDBA741	Fixed Income Analysis	2.00	BUFN762	Major*		BUFN732	
BDBA742	Portfolio Management	2.00	BUFN763	Major*		BUFN734	
BDBA743	International Investment	2.00	BUFN770	Major*		BUFN721	
BDBA843	Seminar in Asset Pricing	3.00	BMGT843	Major*			
BDBA744	Financial Strategy for Corporation	2.00	BUFN710	Major**			
BDBA745	Corporate Governance and Performance	2.00	BUFN714	Major**			
BDBA746	International Corporate and Project Finance	2.00	BUFN771	Major**		BUFN723	
BDBA841	Seminar in Corporate Finance	3.00	BMGT841	Major**			
BDBA842	Topics in Empirical Corporate Finance	3.00	BMGT84C	Major**			
BDBA747 (A-Z)	Special Topics in DBA in FIN Asset Management Track			Practice Focused Electives	BUFN783 Fixed Income Derivatives, BUFN786 Financial Engineering	BUFN744/BUFN742	Fixed Income Derivatives is now BUFN744, Financial Engineering is now BUFN742
BDBA748 (A-Z)	Special Topics in DBA in FIN Corporate Finance Track	1-4		Practice Focused Electives	BUFN735 Financial Strategy for Corporations, BUFN732 Financial Restructuring, BUFN754 Corporate Risk Management, BUFN755	BUFN710/BUFN712	Financial Strategy for Corporations is now BUFN710, Financial Restructuring is now BUFN7
BDBA640	Financial Econometrics I	2.00	BUFN640	Research Tools & Methods			
BDBA641	Financial Econometrics II	2.00	BUFN650	Research Tools & Methods			
BDBA642	Financial Mathematics	2.00	BUFN670	Research Tools & Methods			
BDBA643	Financial Programming	2.00	BUFN758E	Research Tools & Methods		BUFN745	

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Course #	Course Title	Course Credits	Cross-Referenced to	Meets Requirements?		Notes	Course content:
BDBA620	Data Models and Decisions	2.00	BUSI630	Research Tools & Methodologies	IS		
BDBA621	Managerial Economics and Public Policy	2.00	BUSI681	Research Tools & Methodologies	IS		
BDBA720	Data Mining and Predictive Analysis	2.00	BUDT733	Research Tools & Methodologies	IS		
BDBA820	Applied Microeconomics for Business	3.00	BMGT808G	Research Tools & Methodologies	IS		This course covers research methods from economics that have proved to be useful in business disciplines. Students will develop an understanding of how equilibrium
BDBA821	Data Science Research Seminar	2.00	BMGT808Q	Major in IS (Topical)	IS		
BDBA830	Applied Multivariate Analysis	3.00	BMGT837	Research Tools & Methodologies	IS		
BDBA829	Capstone Project	6.00		Capstone			

Finance (FIN)

Major Courses = required 18 credits

Course Number	Course Title
BMGT840	Seminar in Financial Theory
BMGT841	Seminar in Corporate Finance
BMGT843	Seminar in Portfolio Theory
BMGT848A	Financial Research Methods
BMGT848B	Financial Research Methods
BMGT848E	Financial Econometrics
BMGT848K	Seminar in Public Policy Perspectives of Finance
BMGT848M	Seminar in Market Microstructure

Research Methods = 4 courses or 12 credits

Course Number	Course Title
ECON603	Microeconomics I
ECON604	Microeconomics II
ECON623	Econometrics I
ECON624	Econometrics II
ECON624	Econometrics II

Secondary Minor = 12 credits

Students will successfully complete 4 courses with a common theme/sequence. This theme should directly relate to their research and dissertation work.

Required Workshops

Course Number	Course Title
BMGT848F	Workshop in Finance Research
BMGT848R	Workshop in Finance Research

Students are required to take this course for each semester. In situations where a student cannot register for the course due to the 10 credit max. limit, then the student not have to register for the course that semester. However, they are still expected to attend.
These courses are intended for student presentation, guest speakers, and brown bag seminars.

Information Systems (IS)

Major Courses = required 18 credits

Course Number	Course Title
BMGT808G	Applied Microeconomics
BMGT808I	Individuals, Teams and Communities
BMGT808J	Institutions, Firms, and Collectives
BMGT808O	Opportunities at Disciplinary Interfaces
BMGT808P	Quality Transparency and the Value of Information
BMGT808V	Research in Strategy and Information Systems I
BMGT808W	Research in Strategy and Information Systems II

Research Methods = 4 courses or 12 credits

Course Number	Course Title
AREC623	Applied Econometrics I
AREC624	Applied Econometrics II
BMGT808D	Information Systems Economics I
BMGT808E	Information Systems Economics II

Secondary Minor = 12 credits

Students will successfully complete 4 courses with a common theme/sequence. This theme should directly relate to their research and dissertation work.

Required Workshops

Course Number	Course Title
BMGT808R	Research Seminar in Decisions, Operations & Information Technologies

Students are required to take this course for each semester. In situations where a student cannot register for the course due to the 10 credit max. limit, then the student not have to register for the course that semester. However, they are still expected to attend. These courses are intended for the DO&IT speaker series hosted by the dept.

Marketing (MKT)

Major Courses = required 18 credits

Course Number	Course Title
BMGT858A**	Analytical Models
BMGT858C	Consumer Behavior
BMGT858D*	Behavioral Decision Research
BMGT858E*	Research Design and Experimental Methods
BMGT858I*	Information Processing
BMGT858J**	Structural Models
BMGT858L	Marketing Strategy
BMGT858M**	Seminar in Mobile Marketing
BMGT858P	Marketing Models
BMGT858W**	Marketing Models with MCMC

* Required only for Consumer Behavior focus.
**Required only for Quantitative focus.

Research Methods = 4 courses or 12 credits

Course Number	Course Title
sequence. Then choose 2 more follow up methods courses to count	
PSYC601	Quantitative Methods I
PSYC602	Quantitative Methods II
OR	
EDMS646	Quantitative Research Methods II
EDMS651	Applied Multiple Regression Analysis
Quantitative sequence: must take Microeconomic sequence,	
ECON603	Microeconomic Analysis I
ECON604	Microeconomic Analysis II
ECON623	Econometrics I
ECON624	Econometrics II
OR	
AREC623	Applied Econometrics I
AREC624	Applied Econometrics II

Secondary Minor = 12 credits

Students will successfully complete 4 courses with a common theme/sequence. This theme should directly relate to their research and dissertation work.

Required Workshops

Course Number	Course Title
BMGT858R	Marketing Research Seminar

Students are required to take this course for each semester. In situations where a student cannot register for the course due to the 10 credit max. limit, then the student not have to register for the course that semester. However, they are still expected to attend.
These courses are intended for student presentation, guest speakers, and brown bag seminars.

Finance (FIN)

Major Courses = 20-22 credits		Research Tools & Methodologies = 9-12 credits		Practice Focused Electives = 9-12 credits		Capstone Project = 12 credits (min)	
Course Number	Course Title	Course Number	Course Title	Course Number	Course Title	Course Number	Course Title
BDBA644	Financial Management	BDBA640	Financial Econometrics I	BDBA747 (A-Z)	Special Topics in DBA in FIN Asset Management Track	BDBA829	Capstone Project
BDBA645	Advanced Capital Markets	BDBA641	Financial Econometrics II	BDBA748 (A-Z)	Special Topics in DBA in FIN Corporate Finance Track		
BDBA646	Valuation in Corporate Finance	BDBA642	Financial Mathematics				
BDBA647	Derivative Securities	BDBA643	Financial Programming				
BDBA840	Seminar in Financial Theory						
BDBA848(A-Z)	Special topics in DBA in FIN						
BDBA740	Applied Equity Analysis						
BDBA741	Fixed Income Analysis						
BDBA742	Portfolio Management						
BDBA743	International Investment						
BDBA843	Seminar in Asset Pricing						
BDBA744	Financial Strategy for Corporation						
BDBA745	Corporate Governance and Performance						
BDBA746	International Corporate and Project Finance						
BDBA841	Seminar in Corporate Finance						
BDBA842	Topics in Empirical Corporate Finance						

Information Systems (IS)

Major Courses = 20-22 credits		Research Tools & Methodologies = 9-12 credits		Practice Focused Electives = 9-12 credits		Capstone Project = 12 credits (min)	
Course Number	Course Title	Course Number	Course Title	Course Number	Course Title	Course Number	Course Title
BDBA600	Strategic and Transformational IT	BDBA620	Data Models and Decisions	BDBA702	Decision Analytics	BDBA829	Capstone Project
BDBA601	Managing Digital Business Markets	BDBA621	Managerial Economics and Public Policy	BDBA708*	Special Topics in DBA in Information Systems		
BDBA701	Project Management in Dynamic Environments	BDBA720	Data Mining and Predictive Analysis				
BDBA801	Research Methods in Information Systems	BDBA820	Applied Microeconomics for Business				
BDBA802	Institutions, Firms, and Collectives	BDBA830	Applied Multivariate Analysis				
BDBA803	Quality Transparency and the Value of Information						
BDBA804	Research in Strategy and IS I						
BDBA805	Research in Strategy and IS II						
BDBA806	Information Systems Economics I						
BDBA807	Information Systems Economics II						
BDBA808(A-Z)	Special Topics in DBA in Information Systems						
BDBA821	Data Science Research Seminar						
Two tracks: Asset Management and Corporate Finance							

Marketing (MKT)

Major Courses = 20-22 credits		Research Tools & Methodologies = 9-12 credits		Practice Focused Electives = 9-12 credits		Capstone Project = 12 credits (min)	
Course Number	Course Title			Course Number	Course Title	Course Number	Course Title
BDBA850	Seminar in Marketing Strategy	BDBA752	Market-Based Management	BDBA758	Special Topics in DBA in MKT	BDBA829	Capstone Project
BDBA851	Seminar in Consumer Behavior	BDBA753	Consumer Analysis	BDBA857 (A-Z)	Special topics in DBA in MKT (CB)		
BDBA852	Seminar in Marketing Models	BDBA754	Statistical Programming				
BDBA858(A-Z)	Special topics in DBA in MKT (Quant)	BDBA755	Marketing Research & Analysis				
BDBA756	Advanced Marketing Analytics						
BDBA757	Data Science						
BDBA853	Seminar in Structural Models						
BDBA854	Seminar in Analytical Models						
BDBA855	Seminar in MCMC Estimation						
BDBA750	Innovation and Product Management						
BDBA751	Integrated Brand Management						
BDBA856	Experimental Design						
Two tracks: Quantitative and Consumer Behavior							

LEARNING OUTCOME 1

Students will demonstrate a clear understanding of the research tools and methodologies for research investigation and analysis.

MEASURE: Students will be required to successfully pass the methodology courses for their program. Students will be assessed on their clear understanding of the application of statistical methods to quantitative data. Each course will assess students on their discussion of articles and case studies as well as their investigation and analysis on course projects.

CRITERION: At least 90% of students will receive a rating of "Satisfactory" or better from the Academic Director, who will review their performance in the classes. The Academic Director will meet with students rated below "Satisfactory" to help improve their performance or determine their continued participation in the program. A general rubric has been constructed to evaluate the following categories: 1) comprehensive knowledge and understanding of the related content area, 2) integrative understanding across content areas, 3) clear, logical, and convincing arguments with coherent flow and organization, and 4) proposed proper research methods (e.g. research design, setting, sample, measures, etc.). The DBA Faculty Coordinator will review main assignments and consult instructors to complete the rubric.

ASSESSMENT: Every Year, starting in the 2022-2023 academic year.

LEARNING OUTCOME 2

Students will demonstrate a clear understanding of foundational topics and analysis techniques.

MEASURE: Students will be required to successfully pass the major courses for their program. They will be assessed on their understanding of theoretical framework and perspective and encouraged to apply the theoretical frameworks to their own research ideas. Each course will assess students on their exams, discussion of articles and case studies as well as their projects (i.e., literature reviews and papers conceptualizing research ideas).

CRITERION: At least 90% of students will receive a rating of "Satisfactory" or better from the Academic Director, who will review their performance in the classes. The Academic Director will meet with students rated below "Satisfactory" to help improve their performance or determine their continued participation in the program. A general rubric has been constructed to evaluate the following categories: 1) comprehensive knowledge and understanding of the related content area, 2) integrative understanding across content areas, and 3) clear, logical, and convincing arguments with coherent flow and organization. The DBA Faculty Coordinator will review main assignments and consult instructors to complete the rubric.

ASSESSMENT: Every Year, starting in the 2022-2023 academic year.

LEARNING OUTCOME 3

Students will demonstrate a clear understanding of practice-focused analytical skills applied to business problems.

MEASURE: Students will demonstrate their comprehension of analyzing real-world topics and issues to present quality practical implications. Additionally, students will demonstrate appropriate knowledge of the legal and ethical issues related to big data management, privacy preservation, marketing research, financial management and an understanding of the role of all stakeholders when capital allocation decisions are made. Students will complete case studies and oral and written projects that specifically investigate real-world application.

CRITERION: At least 90% of students will receive a rating of "Satisfactory" or better from the Academic Director, who will review their performance in the classes. The Academic Director will meet with students rated below "Satisfactory" to help improve their performance or determine their continued participation in the program. A general rubric has been constructed to evaluate the following categories: 1) comprehensive knowledge and understanding of the related content area, 2) integrative understanding across content areas, 3) clear, logical, and convincing arguments with coherent flow and organization, and 4) present clearly the theoretical and practical implications. The DBA Faculty Coordinator will review main assignments and consult instructors to complete the rubric.

ASSESSMENT: Every Year, starting in the 2022-2023 academic year.

LEARNING OUTCOME 4

Students will demonstrate their ability to apply foundational theories and quantitative research methods and practice-oriented skills to a business research problem.

MEASURE: Students will be required to pass their Capstone Research Project Proposal and Final Presentation of their Project.

CRITERION: The Capstone Doctoral Research Project committee will evaluate the student's proposal and project. Students must obtain a "pass" in the Capstone Doctoral Research Proposal and Final Project Presentation. A rubric has been constructed for the committee to evaluate the student's proposal and final project. The rubric will assess defining the problem, literature review, methodology, results and their implications, with a specific focus on solving the managerial problems. (). For the final project, there will be an additional assessment which will determine if the student addressed the committee's recommendations from the proposal stage.

ASSESSMENT: Once course work has been completed, which is typically, the student's second or third year of the program.

DATE: February 25, 2020

TO: Justina Blanco

Assistant Director of Smith Doctoral Programs

The Robert H. Smith School of Business

FROM: On behalf of the University of Maryland Libraries:

Zaida M. Díaz, Business and Economics Librarian

Maggie Saponaro, Director of Collection Development Strategies

Daniel Mack, Associate Dean, Collection Strategies & Services

RE: Library Collection Assessment

We are providing this assessment in response to a proposal by the PhD Program Office in The Robert H. Smith School of Business to "re-launch" a Doctorate of Business Administration (DBA). The Smith PhD Program Office asked that we at the University of Maryland Libraries assess our collection resources to determine how well the Libraries support the curriculum of this proposed new program.

Serial Publications

Since the program aims at targeting practical and applied research, and to keep up to date with all the latest developments to support students, faculty and researchers, the UMD Libraries have compiled a list of the top academic journals in business. Most likely course assignments will rely upon online journals containing the latest cutting-edge research in a wide-range of areas relevant to the DBA Program.

The University of Maryland Libraries currently subscribe to a large number of scholarly journals—almost all in online format. Many of these are top ranked journals by the **Journal Citation Reports*, in terms of research impact and are widely recognized in the fields of information systems and business analytics, marketing analytics, finance, and/or financial market regulation or financial operations.

*Note: Journal Citation Reports is a tool for evaluating scholarly journals. It computes these evaluations from the relative number of citations compiled in the Science Citation Index and Social Sciences Citation Index database tools.

In cases in which the Libraries do not subscribe to highly ranked journals or any other articles in journals that we do not own, they likely will be available through our Interlibrary Loan/Document Delivery Services.

Top Academic Journals in Business

Here is a current (2020) listing of the field's top journals, most of which are relevant to the Smith DBA Program. This list includes 50 titles from the *Financial Times* research ranking for business schools. The list includes the source and/or database name where it can be located.

- *Academy of Management Journal* (via *Business Source Complete*)
- *Academy of Management Review* (via *Business Source Complete*)

- *Accounting, Organizations and Society* (via *ScienceDirect Journals*)
- *Accounting Review* (via *Business Source Complete*)
- *Administrative Science Quarterly* (via *Sage Journals*)
- *American Economic Review* (via *American Economic Association* and *JSTOR*)
- *Contemporary Accounting Research* (via *Wiley Journals*)
- *Econometrica* (via *Wiley Journals*)
- *Entrepreneurship Theory and Practice* (via *Sage Journals*)
- *Harvard Business Review* (via *Business Source Complete*)
- *Human Relations* (via *Sage Journals*)
- *Human Resource Management* (via *Wiley Journals*)
- *Information Systems Research* (via *INFORMS PubOnLine*)
- *Journal of Accounting and Economics* (via *ScienceDirect Journals*)
- *Journal of Accounting Research* (via *Wiley Journals*)
- *Journal of Applied Psychology* (via *Business Source Complete*)
- *Journal of Business Ethics* (via *Springer Online Journals*)
- *Journal of Business Venturing* (via *ScienceDirect*)
- *Journal of Consumer Psychology* (via *Wiley Journals*)
- *Journal of Consumer Research* (via *Business Source Complete*)
- *Journal of Finance* (via *Wiley Journals*)
- *Journal of Financial and Quantitative Analysis* (via *Business Source Complete* and *Cambridge Core* online)
- *Journal of Financial Economics* (via *ScienceDirect*)
- *Journal of International Business Studies* (via *SpringerLink*)
- *Journal of Management* (via *Sage Journals*)
- *Journal of Management Information Systems* (via *Taylor & Francis*)
- *Journal of Management Studies* (via *Wiley Journals*)
- *Journal of Marketing* (via *Business Source Complete*)
- *Journal of Marketing Research* (via *Business Source Complete*)
- *Journal of Operations Management* (via *Wiley Journals*)
- *Journal of Political Economy* (via *Business Source Complete*, *University of Chicago Press Journals*)
- *Journal of the Academy of Marketing Science* (via *SpringerLink*)
- *Management Science* (via *INFORMS PubOnLine*)
- *Manufacturing and Service Operations Management* (via *INFORMS PubOnLine*)
- *Marketing Science* (via *INFORMS PubOnLine*)
- *MIS Quarterly* (via *Business Source Complete*)
- *MIT Sloan Management Review* (via *Business Source Complete*)
- *Operations Research* (via *INFORMS PubOnLine*)
- *Organization Science* (via *INFORMS PubOnLine*)
- *Organization Studies* (via *Sage Journals*)
- *Organizational Behavior and Human Decision Processes* (via *ScienceDirect*)

- *Production and Operations Management* (via *Wiley Journals*)
- *Quarterly Journal of Economics* (via *Business Source Complete*, *Oxford Journals*)
- *Research Policy* (via *ScienceDirect*)
- *Review of Accounting Studies* (via *SpringerLink*)
- *Review of Economic Studies* (via *Business Source Complete*, *Oxford Journals*)
- *Review of Finance* (via *Business Source Complete*)
- *Review of Financial Studies* (via *Business Source Complete*, *Oxford Journals*)
- *Strategic Entrepreneurship Journal* (via *Wiley Journals*)
- *Strategic Management Journal* (via *Wiley Journals*)

Databases

The Libraries' *Database Finder* (http://www.lib.umd.edu/dbfinder) provides indexing and access to scholarly journal articles and other information sources. Furthermore, faculty and students have access to the *Virtual Business Information Center* (VBIC) https://www.lib.umd.edu/vbic, a business and economics resource portal that provides exclusive access to databases and/or datasets that the Smith School of Business subscribes to, in addition to those databases that the Libraries subscribe. Many of these databases cover subject areas that would be relevant to the DBA proposed program, and highly useful to the DBA capstone project that "centers around a practical problem from the business world that is considered as relevant from both sides, business managers and scholars". To highlight some databases that would be useful for the DBA Program- areas, beyond *Bloomberg*, *SDC Platinum* (software), *Thomson Reuters Eikon*, *Wharton Research Data Services* (WRDS), and many others, there are:

- *Business Source Complete* (EBSCO) – Comprehensive database of business sources, includes over 3600 peer reviewed journals, trade publications, magazines, books, case studies, company profiles, SWOT analysis, etc. It provides full-text access to the Harvard Business Review, McKinsey Quarterly, and thousands of trade publications, and peer-reviewed journals covering topics such as: management, economics, finance, accounting and international business, as well as indexing and abstracts for business journals dating back to 1886. Country economic reports from the EIU, WEFA, ICON Group and CountryWatch are also included.
- *Dissertations & Theses Global* (Proquest) – This database is the authoritative source for information about doctoral dissertations and master's theses. The database represents the work of authors from over 1,000 graduate schools and universities. Full text is available from 1997 to the present. It also contains a significant amount of new international dissertations and theses both in citations and in full text. It offers access to more than 90 percent of the doctoral dissertations accepted each year in North America. The database also covers thousands of dissertations and theses from around the globe. Time Span:1861 to present
- *EconLit* (American Economic Association) – Comprehensive database of economics sources, includes subject indexing and abstracts of economics journals and books, dissertations, and working papers from 1969 forward. Topics include economic theory and history, monetary theory and financial institutions, labor economics, international, regional and urban economics.
- *Foreign Dissertations Database* (CRL)– Provides access to approximately 20,000 foreign doctoral dissertations (dissertations from universities outside the U.S. and Canada) in North American research libraries. Note that no new records are being added to this database. To view

or search current dissertations, please access the CRL catalog. Coverage: Encompasses nearly all areas of study. Time Span: ca.1766 – present.

- *Passport* (Euromonitor: formerly GMID) – International market data for hundreds of products in nearly 50 countries. Covers consumer markets, including apparel, food & drink, consumer electronics, and travel & leisure. Data is excellent and offers detailed Euromonitor reports on consumer markets and trends, consumer companies, brand and market share by company and product.
- *Factiva* (Dow Jones) – Provides access to great deal of business news content covering industries, companies, and general business. Includes full text of the *Wall Street Journal*, *BusinessWeek*, *Dow Jones Newswires*, *Reuters Newswires*, and other major business news publications, as well as full text of many online sources, such as the WSJ online, business blogs, and company blogs. It provides international coverage, including most major world news publications. It is an excellent source for learning more about emerging Social Media companies through its full text searching. With the Factiva News Pages, you can glance at key stories from leading newspapers, including the *Wall Street Journal*, *New York Times*, *Washington Post*, etc. Some content displayed in Factiva is only available via other databases per licensing restrictions.
- *Foundation Directory Online (FDO)* – The leading resource in the world of philanthropy. It provides everything about U.S. foundations and their millions of grants around the world. Search up to nine databases at once — grant-makers, companies, grants, 990s, RFPs, philanthropy news, foundation-sponsored publications, nonprofit literature, and jobs. Includes descriptions of more than 100,000 Community Foundations; Corporate Giving Programs, Operating Foundations, Private Grantmaking Foundations (independent and company-sponsored foundations), and Grantmaking Public Charities.
- *IBISWorld* (IBISWorld) – Provides comprehensive industry market research reports and analysis on U.S., China and Global Industries; U.S. Risk Ratings, and U.S. Business Environment Profiles. Analysis of growth trends, influencing factors, competitive environment, and key issues facing industries, including information on key personnel and financials for leading publicly traded companies. Includes access to IBIS industry Risk Ratings reports. Archival reports are available for each industry with some back to 2001.
- *IEEE Xplore* (IEEE)– Provides full-text access to IEEE transactions, journals, magazines and conference proceedings published since 1988 and all current IEEE Standards. Includes access to Bell Labs Technical journal Archive (BLTJA) 1922-2015. Among topics covered are: computer engineering, biomedical technology and telecommunications, electric power, aerospace and consumer electronics, among many others.
- *Mergent Intellect* (Mergent/Dun) – Provides access to private and public U.S and international business data, company annual reports, industry news, reports, ratios, facts and figures, executive contact information, and industry profiles. Includes information from Hoover's and Dun & Bradstreet.
- *Mergent Online* (FTSE Russell) – Current and historical (past 15 years) firm descriptions, statistics, financial information, annual reports, mergers, acquisitions, disposals, joint ventures, long-term debt, bond ratings, capital stock, insider trading and supply chain for US and foreign companies. Also includes access to *Investext* analyst reports - use tab on the far right upon entering the resource.

- *Mintel Oxygen* (Mintel Group) – Consumer research reports covering the US and European marketplace. Each report combines data and analysis of the competitive landscape, market-share analysis, consumer profiles, and demographics. Reports include results of consumer product surveys, graphs and charts. Provides full-text reports on a wide range of market research studies, analyzing market sizes and trends, market segmentation, consumer attitudes and purchasing habits, opportunities, weaknesses and the future of the market.
- *Nexis Uni* (Lexis Nexis; formerly LexisNexis Academic) – Full-text access to over 15,000 sources of news, business, legal, and reference information, including hundreds of U.S. and foreign newspapers, legal and business publications, wire services, broadcast media transcripts, and trade/news magazines.
- *PolicyMap* (PolicyMap) – An online (no software installation needed) US national data and mapping tool and analytics platform with varied applications.
- *Science Direct* (Elsevier) – It is an international leading source for scientific, technical, and medical research. It is a peer-reviewed, full text database containing e-books and online journal titles covering the fields of business, computing, economics, science, technology, health and life sciences.
- *Simply Analytics* (formerly: SimplyMap) – Simply Analytics is a web-based mapping application that allows you to create thematic maps and reports using demographic, business and marketing data. Data can be downloaded for use with other software such as Excel and GIS.

Also the following general/multidisciplinary databases: *Academic Search Ultimate, MasterFILE Premier, JSTOR*, *ProjectMUSE, HathiTrust* are good sources of articles relevant to the DBA Program.

In many, and likely in most cases, these indexes offer full text copies of the relevant journal articles. In those instances in which the journal articles are available only in print format, the Libraries can make copies available to students and faculty through the Libraries' Interlibrary Loan service (https://www.lib.umd.edu/access/ill-article-request). (For specific details, see below the Interlibrary Loan Services section.)

Monographs

The Libraries regularly acquire scholarly monographs in all areas of business, and allied subject disciplines. Monographs not already part of the collection can usually be added upon request.

Even though most library research for this program likely will rely upon online journal articles, students may wish to supplement this research with monographs. Fortunately, more and more monographs are available as individual e-books or through online collection packages, among them:

- *EBSCO eBook Collection* – A collection of e-texts covering topics in computer science, business, international relations, education, environmental science, psychology, and civil rights law and history.
- *Gale Virtual Reference Library* – Offers more than 85 reference sources including encyclopedias, almanacs, series and more. Provides access to more than 300 encyclopedias and selected industry-standard reference series. Including content from SAGE Reference, John

Wiley & Sons, Cambridge University Press, Berkshire Publishing Group, Cartographica, Linworth and Gale imprints.

- *Historical Encyclopedia of American Business* (through Gale) – Covers the full breadth of American business history. Includes overviews on different sectors of the economy, individual industries, significant economic events, and general topics such as business cycles. labor strikes and outsourcing. There are also overviews on broad legal topics such as antitrust legislation, bankruptcy laws and patent laws. Also offers brief biographies of individual persons who have played exceptional roles in American business as well as information about individual companies, corporations, labor unions, and government agencies.
- *IEEE/Wiley eBooks* – The collection of titles includes practical handbooks, introductory and advanced texts, reference works and professional books with an emphasis on leading areas of research, such as Aerospace; Bioengineering; Communication, Networking & Broadcasting; Components, Circuits, Devices & Systems; Computing & Processing (Includes Hardware & Software); Engineered Materials, Dielectrics & Plasmas; Fields, Waves & Electromagnetics; General Topics for Engineers (Math, Science & Engineering); Geoscience; Photonics & Electro-Optics; Power, Energy & Industry Applications; Robotics & Control Systems; Signal Processing and Analysis.
- *OECD iLibrary* – The online library of the Organization for Economic Co-operation and Development. Comprises 20 book collections by theme, containing all OECD monographs and reports, most OECD periodicals, and the OECD statistical databases. NOTE: Even though current access to the database ended on August 31, 2018, since we have perpetual access rights to OECD, there will be content available, covering 1998-2018.
- *Project Muse/UPCC Ebooks* – Full-text access to thousands of books published by major university presses.
- *ProQuest Ebook Central* – Ebrary is a collection of thousands of online full text books and other materials in a variety of subject areas. In order to view, copy, or print you will need to install the ebrary Reader software.
- *SAGE Reference Collection* – Online versions of published reference works from SAGE. A great place to begin your research.
- *Sage Research Methods* (or Sage Research Methods Online or SRMO or SRM Research Methods Online) – SRMO is a large collection of books, reference books, videos, and datasets on social science research methods. It includes a methods map, project planning tool, and the notable "little green book" series (Quantitative Applications in the Social Sciences) and the "little blue book" series (Qualitative Research Methods) in full text. SRMO also includes the Practical Skills & Academic Research video collection of 440 streaming videos specifically on social science research skills. This collection covers key areas such as writing a research proposal, planning and designing a research project, and securing ethical approval are explicitly covered. Practical skills such as project management, writing for publication, presenting work, and building networks are also presented.
- *Springer Complete eBook Collection* – Springer provides online full-text access to thousands of English, French, Italian, and Spanish books in the arts, sciences, law, mathematics, medicine, computing, and other disciplines. Most books are from 1996 to the present, and include Apress,

Birkhauser, Copernicus Books, Humana Press, Physica – Verlag, Plenum US, Springer, Springer – Verlag, Steinkopff, and TELOS imprints.

- *World Scientific eBooks* – Titles in the collection span a wide variety of subjects: Mathematics, Physics/Nonlinear Science, Chemistry/Materials Science/Nanotechnology, Computer Science, Engineering, Environmental Science, Medicine and Healthcare, Life Sciences, Business and Economics, General and Popular Science, Social Sciences and Asian Studies.

Even in instances when the books are only available in print, students and faculty will be able to request specific chapters for online delivery through the Interlibrary Loan program (https://www.lib.umd.edu/access/ill-article-request).

A search of the University of Maryland Libraries' WorldCat UMD online catalog was conducted, using a variety of relevant subject terms, for example: marketing analytics and government or technology management and business (limited to the last 5 years in Libraries Worldwide), yielded a sizable list (34,690) of citations of books (mostly on e-book format) that we own, among them a sample of titles:

- *Business Intelligence Strategy and Big Data Analytics: A General Management Perspective* (e-book, 2016)
- *Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results* (e-book, 2016)
- *Building A Business of Politics: The Rise of Political Consulting and the Transformation of American Democracy* (e-book, 2016)
- *Corporate Social Responsibility: Win-Win Propositions for Communities, Corporates and Agriculture* (e-book, 2018)
- *Manpower alternatives to enhance total force capabilities: could new forms of reserve service help alleviate military shortfalls?* (e-book, 2019)
- *Entrepreneurship and Firm Performance* (e-book, 2016)
- *The Aerospace Business: Management and Technology* (e-book 2020)
- *Knowledge Management and Risk Strategies* (2018)

A further search using the same search terms, revealed that the Libraries' membership in the Big Ten Academic Alliance (BTAA) dramatically focuses these holdings and citations at about 5,443 results in Big Ten Academic Alliance. As with our own materials, students can request that chapters be copied from these BTAA books if the books are not available electronically.

Interlibrary Loan Services

Interlibrary Loan services (https://www.lib.umd.edu/access/ill) provide online delivery of bibliographic materials that otherwise would not be available online. As a result, remote users who take online courses may find these services to be helpful. Interlibrary Loan services are available free of charge.

The article/chapter request service scans and delivers journal articles and book chapters within three business days of the request--provided that the items are available in print on the UM Libraries' shelves or in microform. In the event that the requested article or chapter is not available on campus, the request will be automatically forwarded to the Interlibrary Loan service (ILL). Interlibrary Loan is a service

that enables borrowers to obtain online articles and book chapters from materials not held in the University System of Maryland.

Please note that one limitation of these services that might create some challenges for the online student is that the Libraries are not allowed to make online copies of entire books. The only way that a student can get access to a print copy of an entire book is to physically come to the Libraries and check out that book.

Additional Materials and Resources

In addition to serials, monographs and databases available through the University Libraries, students in the proposed program will have access to a wide range of media, datasets, software, and technology. Media in a variety of formats that can be utilized both on-site and via ELMS course media is available at McKeldin Library. GIS Datasets are available through the GIS Data Repository (https://www.lib.umd.edu/gis/data-and-resources) while statistical consulting and additional research support is available through the Research Commons (http://www.lib.umd.edu/rc) and technology support and services are available through the Terrapin Learning Commons (http://www.lib.umd.edu/tlc).

The business and economics subject specialists: Zaida Díaz zdiaz@umd.edu and Lily Griner griner@umd.edu, also serve as an invaluable resource to programs such as the one proposed. Through departmental partnerships, subject specialists actively develop innovative services and materials that support the University's evolving academic programs and changing research interests. Subject specialists provide one-on-one research assistance online, in-person, or via the phone. They also provide information literacy instruction and can provide answers to questions regarding publishing, copyright and preserving digital works.

Other Research Collections

Because of the University's unique physical location near Washington D.C., Baltimore and Annapolis, University of Maryland students and faculty have access to some of the finest libraries, archives, major trade associations and/or societies, government organizations and research centers in the country that are vitally important for researchers in all areas of business, among them are the: Library of Congress, Bureau of Economic Analysis (BLS), U.S. Census Bureau (including the Business and Economic Census), Securities and Exchange Commission (SEC), World Bank/IMF, Federal Deposit Insurance Corporation (FDIC), Bureau of Economic and Business Affairs (EB), Office of Commercial and Business Affairs (CBA), United States Chamber of Commerce (USCC), Securities Investor Protection Corp., National Science Foundation [Centers of Research Excellence in Science and Technology (CREST) and HBCU Research Infrastructure for Science and Engineering (HBCU-RISE)], among many others.

Conclusion

With our substantial journals holdings and index databases, as well as additional support services and resources, the University of Maryland Libraries have a robust collection of resources to support teaching and learning the DBA Program. These materials are supplemented by a strong monograph collection.

Additionally, the Libraries Scan & Deliver and Interlibrary Loan services make materials that otherwise would not be available online, accessible to remote users in online courses. As a result, our assessment is that the University of Maryland Libraries are able to meet the curricular and research needs of the proposed Doctorate in Business Administration (DBA) Program at the Smith School of Business.

TABLE 1: RESOURCES

Resources Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1.Reallocated Funds		$ -	$ -	$ -	$ -
2. Tuition/Fee Revenue (c+g below)	$ 900,000	$ 1,800,000	$ 2,460,000	$ 2,460,000	$ 2,460,000
a. #FT Students	2	4	6	6	6
b. Annual Tuition/Fee Rate	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
c. Annual FT Revenue (a x b)	$ 100,000	$ 200,000	$ 300,000	$ 300,000	$ 300,000
d. # PT Students	16	32	48	48	48
e. Credit Hour Rate	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 2,500.00
f. Annual Credit Hours	20	20	18	18	18
g. Total Part Time Revenue (d x e x f)	$ 800,000	$ 1,600,000	$ 2,160,000	$ 2,160,000	$ 2,160,000
3. Grants, Contracts, & Other External Sources	$ -	$ -	$ -	$ -	$ -
4. Other Sources	$ -	$ -	$ -	$ -	$ -
TOTAL (Add 1 - 4)	**$900,000**	**$1,800,000**	**$2,460,000**	**$2,460,000**	**$2,460,000**

Graduate

(FY2018)	annual	per credit hour
resident	$50,000.00	$ 2,500.00
non-resident	$50,000.00	$ 2,500.00

TABLE 2: EXPENDITURES

Expenditure Categories	Year 1	Year 2	Year 3	Year 4	Year 5
1. Faculty (b+c below)	$252,700	$520,562	$1,072,358	$1,104,528	$1,137,664
a. #FTE*	1.0	2.0	4.0	4.0	4.0
b. Total Salary	$190,000	$391,400	$806,284	$830,473	$855,387
c. Total Benefits	$62,700	$129,162	$266,074	$274,056	$282,278
2. Admin. Staff (b+c below)	$93,100	$95,893	$197,540	$203,466	$209,570
a. #FTE	1.0	1.0	2.0	2.0	2.0
b. Total Salary	$70,000	$72,100	$148,526	$152,982	$157,571
c. Total Benefits	$23,100	$23,793	$49,014	$50,484	$51,999
3. Total Support Staff (b+c below)	$79,800	$82,194	$84,660	$87,200	$89,816
a. #FTE	1.0	1.0	1.0	1.0	1.0
b. Total Salary	$60,000	$61,800	$63,654	$65,564	$67,531
c. Total Benefits	$19,800	$20,394	$21,006	$21,636	$22,285
4. Equipment	$0	$0	$0	$0	$0
5. Library	$0	$0	$0	$0	$0
6. New or Renovated Space	$0	$0	$0	$0	$0
7. Other Expenses: Operational Expenses	$145,000	$280,000	$379,000	$379,000	$379,000
TOTAL (Add 1 - 7)	**$570,600**	**$978,649**	**$1,733,557**	**$1,774,194**	**$1,816,050**
resources - expenditures	$329,400	$821,351	$726,443	$685,806	$643,950

* 1 FTE is rouhgly equivalent to 4 x 3-credit courses

benefits	0.33
inflation	1.03

								Financials		Program Requirements:		Type of Student:			Admissions Requirements					
School Name	DBA	PhD	Enrollment	Market	Coursework	How do you get	Remote	Cost billed	Financial	Course	Thesis?	Audience:	Part	Eligibility for	Application	Letters of	Transcripts	GMAT?	English	Notes:
Washington University in St. Louis, Olin Business School	DBA in Finance	Yes	15 Started with 4 in 2010. Only admit a few each year.	Part time students are those that are working professionals, which is the market for which the DBA program was designed for. They saw an increase in full-time requests from international students, who most likely did not get into PhD programs.	Required course work is from Masters program. 2 Specific courses for DBA - a direct reading (independent with faculty) and a Research Methods course. Some do take PHD courses, but are assessed on a case by case basis.	Part-time students primarily only take Masters courses (MS in Finance and MBA). They take the evening courses offered in this program. PhD courses are not adapted to accommodate part-time students of the DBA program. Full-time students can finish in 4 years and part-time students can finish in 5-6. Overall 7 year time limit.	None	$1810 per credit hour.	None (offers student loans or work study)	**48 credits** (26 required/22 elective), **24 research credits**	Yes	Aimed at those who are working in industry and may continue work during their enrollment in the DBA Program:"Practioners" - careers in corporations, consulting firms, or government agencies.	Both options	Yes	Yes - $?	3	Yes	Yes	Yes	Health Insurance Requirement

					Financials		Program Requirements		Type of Student:			Admissions Requirements					
School Name	DBA Offered	PhD Program	Enrollment	Entering each year	Cost billed to student	Financial Support	Course Requirements:	Thesis?	Audience:	Part Time/Full Time	Eligibility for International Paricipants?	Application/ Application fee	Letters of Recommendation	Transcripts	GMAT/ GRE	English Proficiency Requirement	Notes:
Washington University in St. Louis, Olin Business School	DBA in Finance	Yes	15	2-4	$1810 per credit hour.	None (offers student loans or work study)	**48 credits** (26 required/22 elective), **24 research credits**	Yes	Aimed at those who are working in industry and may continue work during their enrollment in the DBA Program:"Practioners" - careers in corporations, consulting firms, or government agencies.	Both options	Yes	Yes - $?	3	Yes	Yes	Yes	Health Insurance Requirement
Case Western Reserve University	Doctor of Management	Yes	57	20 students each year	$156,000 (3 years)	Eligibility for Nonprofit Fellowships	18 courses (3 years) plus workshops and deliverables	Yes	Practioners	Flexible - 30 hours of study per week plus periodic residencies		Yes - #100	2	Yes	No	?	Option to Pursue PhD in Management, Sustainable Systems (1 additional year) Requires 7 or 8 essays.Rolling admissions Simiar to an EMBA
Harvard	DBA: Acct &Mgmt, Mgmt, Mkt, Strategy, & Tech & OM	Yes: Business Economics, OB & Health Policy (Mgmt)	55	10-12 across 5 DBA programs	None - DBA and PhD treated the same	All receive funding from HBS ($40,200 per year up to 5 years)	Minimum of 13 semester long doctoral courses	Yes	No specificaiton of industry versus research.	Full time	Yes	Yes - $105	3	Yes	Yes	Yes	DBA and PhD are the same
Temple University	Executive DBA	Yes	80	25-30	$124,200 total	None	42 credits	Yes	Designed for professionals with extensive managerial experience. Investigate applied research problems.	Part time	Yes	Yes - $100	2	Yes	Optional	No	Current resume and 2 required essays
University of Florida	DBA	Yes	54	15-22	$108,159 (3 years)	Scholarships, Fellowships and Assistantships not available.	60 credits (3 year program total)	Yes	Designed for a small, select group of experienced executives in senior leadership positions who hold master's degree from an accredited U.S. univerity or its international equivalent and are committed to pursuing a formal, rigorous program as practioner-scholars.	Flexible - minimum time on campus	Yes	Yes - $?	2	Yes	Yes	Yes	
Georgia State University	Executive Doctor in Business	Yes	51	17-21	$117,500 (total)	None	Six semesters - 3 three hour courses per semester	Yes	Program participants are senior-level executives with years of experience in a variety of organizations.	Flexible - minimum time on campus	Yes	Yes - $100	0	Yes	No	No	"Lawful Presence" and essays required
University of South Florida	DBA	Yes	58	23, 35,30	$92,500	Gives $6000 for student research and travel expenses	52 credit hours + 20 credit hours of dissertation	Yes	Designed for working professionals.	Flexible - minimum time on campus	Yes	Yes	3	Yes	Optional	Yes	Requires the same core of research method courses that PhD students have to complete

669 Doctorate in Business Administration: Key Differences between Morgan State PhD in Business Administration vs Maryland Smith DBA

Introduction

The Maryland Smith Doctorate of Business Administration (Smith DBA) is a practitioner-oriented professional doctoral-level degree designed for senior executives and researchers in industry and government in which advanced research skills in analyzing business problems are required. The program is intended to provide theoretical knowledge in the business field, allowing professionals to showcase their expertise and contribute to senior-level management practices.

While the PhD in Business Administration at Morgan State University (Morgan PhD) offers a PhD in Business Administration, its intended focus, structure, and degree outcomes are significantly different from the Smith DBA. This document will highlight the significant differences between each program, bringing attention to the centered goals of the Morgan PhD and the Smith DBA.

Target Audience

The Morgan PhD targets individuals who are preparing for careers in academia, which include the areas of research, teaching, and consulting. Individuals looking to obtain the necessary credentials to teach at universities full-time. The Morgan PhD is structured around different aspects of exposure to university-level teaching, culminating with the completion of a dissertation that focuses on research furthering education leaders' understanding of a particular problem in business education.

The Smith DBA is a practitioner-oriented professional doctoral-level degree designed for senior executives and researchers in industry and government. The Smith DBA is intended to provide theoretical and practitioner knowledge in the business field, allowing professionals to showcase their expertise and contribute to senior-level management practices. The Smith DBA provides the necessary skills essential in advancing to leadership positions within business and financial organizations of global reach.

Career Aspirations

The Morgan PhD is focused on making contributions to scholarship, and thus is on a path to a career in academia. Their goal is to become an in-depth specialist in a functionalized area

through research, publishing in academic journals and teaching, which is necessary to become a faculty member at a research-oriented institution. The Morgan PhD strives to prepare themselves for tenure-track faculty positions at colleges and universities.

The DBA candidate is largely driven by the search for advanced personal challenge. Such individuals have already achieved great success in their professional careers and are looking to expand their practical knowledge beyond their business experience and/or advanced degrees. Due the emphasis on applied focus, the Smith DBA provides opportunity for students to not only identify, but also provide resolution to research challenges in business applications. The DBA candidate will remain a working professional throughout the program, and upon graduation, will continue in the business world in the areas of leadership, consulting, organizational innovation, and corporate policy making.

Program Requirements

Overview

The Morgan PhD curriculum is designed to provide graduates with in-depth exposure to a specific business content area, sophisticated analytical methods, and education techniques. This last feature is unique to the program and is structured around different aspects of exposure to university-level teaching. The Morgan PhD prepares graduates for careers in research, teaching, and consulting to be effective researchers and teachers at the university level. The Morgan PhD highlights the importance of teaching skills in their program development, as the courses are designed to guide students in understanding relevant issues associated with teaching.

The Smith DBA provides students with the understanding of practice-focused analytical skills necessary to confront the challenges global organizations face. DBA candidates will demonstrate a clear understanding of the research tools and methodologies for research in the areas of Information Systems, Marketing, and Finance concentrations. Additionally, students will demonstrate a clear understanding of practice-focused analytical skills applied to business problems.

Snapshot of Program Requirements

PROGRAM REQUIREMENTS		
	Morgan State PhD in Business Administration	**Maryland Smith Doctorate of Business Administration**

Coursework Requirements	Foundation: 21 credits; Area of Specialization: 18 credits, Minor Field: 9 credits, Dissertation: 12 credits	Major Field of Study: 20-22 credit, Research Tools & Methodologies: 9-12 credits, Practice-Focused Electives: 9-12, Capstone project: 12 credits (54 credits total minimum)
Examination Requirements	Students are required to take major/minor comprehensive examination to advance to candidacy, as well as complete an early research case study.	Smith DBA provides a three-phase evaluation each academic year based on GPA, capstone project progress, and coursework completion.
Teaching Requirements	Prior to graduation, a student must teach at least one course in his/her area of expertise, under the guidance of a faculty member. Must prepare a teaching portfolio	Teaching requirements are not relevant for the Smith DBA, as the program is focused on training students to combine research with concrete business problems.
Professional Development Requirement	Students must attend Professional Development Seminars, which provide information about university, program, professional of university research and teaching	The Smith DBA does not have a professional development requirement. Alternatively, Smith DBA will provide optional workshops.
Dissertation/Capstone	The Morgan PhD dissertation must address a major research issue. It is expected to result in a significant contribution to the received body of knowledge in the field of study and the student is expected to publish it.	The Smith DBA Capstone project is focused on the application of learned program knowledge to a real-life problem and the successful solution. The project is designed to develop and demonstrate research skills which the student will utilize and build upon in his/her post-DBA career.
Time Limits	Full-time students must enroll in 9-credits/minimum per semester and are required to complete the program within 7 years. Part-time students must complete the program within 8 years of entering.	Students can complete the program in three years. Part-time students may take an additional year for completion.

Coursework Requirements

The Morgan PhD is specifically designed to prepare graduates for careers in academic institutions, with a focus on academic research and teaching. To achieve this, students are required to complete elements of business operations, foundation, and minor field courses. These course requirements are intended to provide students with a broad knowledge of business operations, understanding of philosophy and tools of scientific inquiry, and provide a firm foundation in theory within business fields. The foundation courses place great emphasis on the development of student's research skills, particularly the quantitative and qualitative methods involved in research processes.

In contrast, the Smith DBA provides comprehensive knowledge of foundational concepts in information systems, marketing and finance, providing students with analytical skills, knowledge of legal & ethical issues related to big data management, behavioral theory and an understanding of regulatory structure. The Smith DBA requires coursework completion in methodologies and practice-focus, which leads to a capstone project that identifies a real-world business problem.

Examination Requirements

The Morgan PhD requires that all students must pass written and oral comprehensive exams in both the major and minor field. These exams start as early as students' first year in the program and continue until the third year of the program. Ultimately, these exams are conducted to determine if a student is fit for candidacy.

The Smith DBA does not require one specific examination. Rather, the program provides a three-phase evaluation each academic year in which progress will be evaluated and candidacy will be determined. The evaluation is based on GPA, coursework completion, and capstone project progress.

Teaching Requirements

The Morgan PhD stipulates a teaching requirement, which requires that prior to graduation, a student must teach at least one course in their area of expertise, under the guidance of a faculty member. This assignment will be determined by the department under which the student is studying and timing will be at the discretion of the department chair. Regardless of whether a student is supported by the university, they must complete this teaching requirement. Lastly, the Morgan PhD requires that students must also prepare a teaching portfolio, designed for prospective employers and containing a statement of teaching philosophy, syllabi, teaching material, and peer evaluations of the student's teaching.

In contrast, Smith DBA *does not* have a teaching requirement. The Smith DBA is focused on training students to combine applied research with concrete business problems. It is less focused on extending existing theories, and rather focuses on applying existing theories to explain specific problems, which typically arise in the companies in which students work. Finally, the Smith DBA will not require a teaching portfolio as their goal of their graduates is placement in industry.

Professional Development Requirements

Another specific program requirement for Morgan PhD focuses again on teaching as professional development. All first and second-year PhD students must attend Professional Development Seminars, which is a requirement for both full-time and part-time learners. The intention of the seminars is to provide students with information about the profession of university research and teaching.

Alternatively, Smith DBA will provide resources that allow students to investigate real-world issues to identify business best practices. The intrinsic value of the Smith DBA is the focus of formatting for industry, allowing students to demonstrate their readiness for senior-level leadership while completing the program. Through its practitioner approach towards assessing situational risks, understanding organizational issues, and implementing solutions into action, students acquire the advanced skills necessary to grow as a leader.

Dissertation versus Capstone Requirement

The Morgan PhD culminates with the completion of a dissertation that must address a major research issue. It is expected to result in a significant contribution to the received body of knowledge in the field of study and furthermore publish in a top field journal. Within 12 months of passing the comprehensive examination in the area of specialization, the Morgan PhD requires students to successfully defend their dissertation proposal.

Alternatively, the Smith DBA requires a capstone project, focused on the application of learned program knowledge to a real-life problem and a successful resolution. The project is designed to develop and demonstrate research skills which the student will utilize and build upon in their post-DBA career. Students will have a proposal as the first formal stage of the Capstone Project. The second stage is the final oral examination of the capstone project. Smith DBA students are required to defend their proposal in their third year, earlier in the semester than later. Upon successful defense, the students can continue their project towards completion of the capstone.

Program Time Limits

The Morgan PhD stipulates that full-time students must enroll in a minimum of 9-credit hours per semester and are required to complete the program within 7 years after entering it. For part-time students, the requirement is that students must complete the program within 8 years of entering.

The Smith DBA program is designed so that students can complete the program in three years. Students who are participating in the program on a part-time basis may take an additional year for completion. Students who are not able to continue in the program at the end of the second-year or due to failure to successfully defend the capstone project will be offered a terminal Master's degree in the discipline of their study.

Career Goals and Alumni Placements at Morgan State

Alumni of the Morgan PhD have secured positions at a variety of United States institutions across the country. Information on placement data of the Morgan PhD was gathered from Morgan State's website (see Table 1) and a public search on LinkedIn (see Table 2). It is evident that the goal of Morgan's PhD Program is to place graduates into academic positions focused primarily on teaching. From a placement inquiry made to Morgan State, it was confirmed that the PhD Program has a 98% placement rate of graduates into tenure-track positions. This statistic further exemplifies the manner to which the Morgan PhD prepares its graduates for careers in academia. In contrast to the Smith DBA where the focus is on practical application for industry with the goal of non-academic industry placements. At this time, this is all the information that we have been able to access.

Table 1

Morgan State University, PhD in Accounting Alumni Placements[1]			
Name	Specialization	Graduation[2]	School & Position
Cynthia Lloyd	Accounting	2010	Associate Professor of Accounting, Texas A&M University
Susan Muzorewa	Accounting	2012	Assistant Professor of Accounting, Delaware State University
Yu-Ho Chi	Accounting	2012	Associate Professor of Accounting, University of North Carolina at Pembroke
Candice Lynette Deal	Accounting	2013	Assistant Professor of Accounting, Eastern Connecticut State University
Cathalene Roger Bowler	Accounting	2013	Assistant Professor of Accounting, University of Northern Iowa
Issac Bonaparte	Accounting	2013	Assistant Professor of Accounting, Howard University
Henry Mburu	Accounting	2015	Lecturer, The Catholic University of America

Musab Ababneh	Accounting	2015	Assistant Professor of Accounting, Bowie State University
Delvin Seawright	Accounting	2015	Assistant Professor of Accounting, Lamar University
Ayishat Omar	Accounting	2018	Assistant Professor, Rowan University

1. **Table 1 - Provides placement data for alumni of Morgan State University's PhD in Accounting Program. Data is composed of graduates since 2010.**
2. **Source: Morgan State University Website - Alumni of Accounting PhD Program**

Table 2

Morgan State University, PhD in Business Administration[3]			
Specialization	Associate Professor	Assistant Professor	School[4]
Information Systems	1 (Grad Year: 2009)	2 (Grad Years: 2010, 2018)	University of the District of Columbia, Shenandoah University, University of the Virgin Islands
Marketing	1 (Grad Year: 2010)	4 (Grad Years: 2008, 2010, 2011)	Tennessee State University, Howard University, University of Baltimore
Finance	0	2 (Grad Years: 2015)	Gonzaga University, California State University

3. **Table 2 - Provides placement data for alumni of Morgan State University's PhD in Business Administration, with concentrations in Accounting, Information Systems, Marketing and Finance.**
4. **Source: Public Information obtained thru Linkedin**

As evidenced through their alumni placements in Table 1 and Table 2, the Morgan PhD Program is structured to provide exposure towards various aspects of university-level teaching. Its intention is to forge a path into academia, equipping graduates with the in-depth knowledge to become specialists in functionalized areas by means of research. In contrast, the Smith DBA is focused on providing theoretical knowledge in the business field, allowing professionals to showcase their expertise and contribute to senior-level management practices. Our target placements are not academic institutions, rather advancement in industry in the areas of leadership, consulting, organizational innovation, and corporate policy making.

Industry Analysis for DBA Specializations

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Pages 2-54 were obtained from the Bureau of Labor Statistics: Occupational Outlook Handbook – www.bls.org/ooh

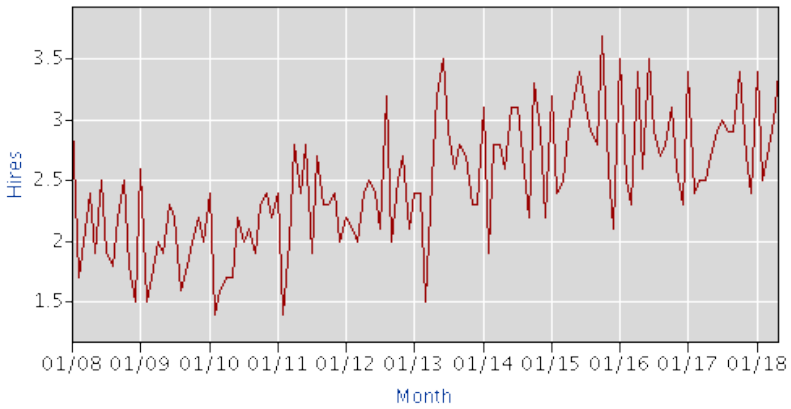
BUREAU OF LABOR STATISTICS - EMPLOYMENT PROJECTIONS									
Occupation Title	**SOC Code**	**Employment 2016 (thousands)**	**Employment 2026 (thousands)**	**Employment Change 2016 -2026 (thousands)**	**Employment Change 2016 - 2026 (Percent)**	**Occupational Openings 2016-2026 Annual Average (thousands)**	**2017 Median Annual Wage**	**Typical Entry Level Education**	**Work Experience**
Computer and information research scientists Example Job Titles * Computational Theory Scientist * Computer Scientist * Programming Methodology and Languages Researcher	15-1111	27.9	33.2	5.4	19.2	2.5	114,520	Master's degree	None
Computer science teachers, postsecondary Example Job Titles * Computer Information Systems Professor * IT Professor * Information Systems Professor * Information Technology Professor	25-1021	39.7	42.9	3.2	8.1	3.4	78,630	Doctoral or professional degree	None
Business teachers, postsecondary Example Job Titles * Business Administration Professor	25-1011	104.2	123.0	18.9	18.1	10.4	80,300	Doctoral or professional degree	None
Computer and information systems managers Example Job Titles	11-3021	367.6	411.8	44.2	12.0	32.5	139,220	Bachelor's degree	5 years or more

* Application Development Director * Chief Technology Officer * Computer Operations Manager * Computer Security Manager * Data Operations Director * Data Processing Manager * Information Systems Director * Information Systems Manager * Information Technology Director * Information Technology Systems Director * Internet Technology Manager * MIS Director * Management Information Systems Director									
Computer systems analysts Example Job Titles * Applications Analyst * Computer Systems Analyst * Computer Systems Consultant * Data Processing Systems Analyst * Information Systems Analyst * Information Systems Planner * Programmer Analyst * Systems Architect	15-1121	600.5	654.9	54.4	9.1	44.9	88,270	Bachelor's degree	None
Social scientists and related workers, all other Example Job Titles * Behavioral Scientist * Demographer * Ethnologist * Etymologist * Linguist	19-3099	42.1	44.9	2.7	6.5	4.2	79,370	Bachelor's degree	None

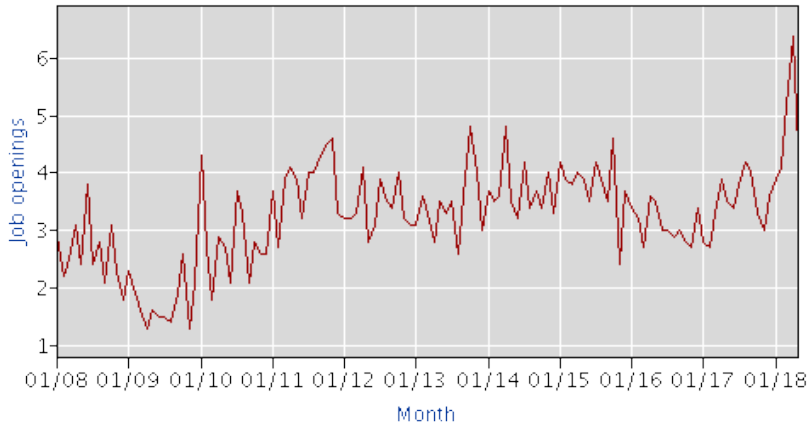
* Philologist * Social Scientist									
Statisticians Example Job Titles * Analytical Statistician * Applied Statistician * Statistical Analyst	15-2041	37.2	49.8	12.6	33.8	4.4	84,060	Master's degree	None

Job Openings and Labor Turnover Survey

Series Id: JTU51000000HIR **Industry:** Information **Region:** Total US **Data Element:** Hire



Series Id: JTU51000000JOR **Industry:** Information **Region:** Total US **Data Element:** Job openings



Occupational Employment and Wages, May 2017

15-1111 Computer and Information Research Scientists

Conduct research into fundamental computer and information science as theorists, designers, or inventors. Develop solutions to problems in the field of computer hardware and software.

National estimates for this occupation

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
27,920	3.4 %	$57.49	$119,570	1.4 %

Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	$31.51	$42.67	$55.06	$70.02	$84.99
Annual Wage (2)	$65,540	$88,760	$114,520	$145,630	$176,780

Industry profile for this occupation

Industries with the highest published employment and wages for this occupation are provided.

Industries with the highest levels of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Federal Executive Branch (OES Designation)	7,630	0.38	$51.88	$107,910
Computer Systems Design and Related Services	6,000	0.30	$58.03	$120,700
Scientific Research and Development Services	4,640	0.72	$61.41	$127,730
Colleges, Universities, and Professional Schools	1,850	0.06	$42.75	$88,920
Software Publishers	1,610	0.44	$66.33	$137,970

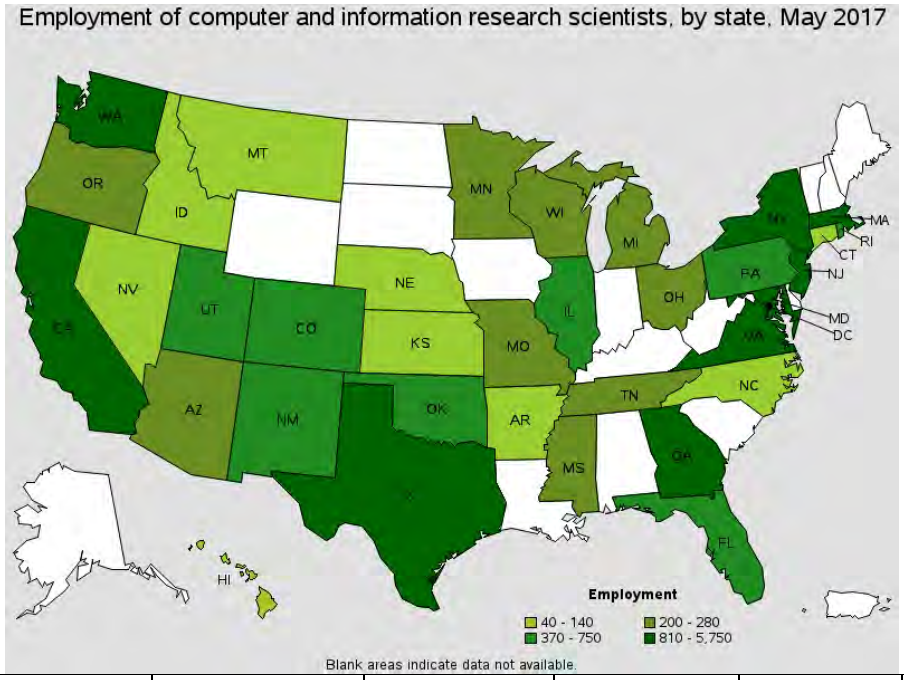
Industries with the highest concentration of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Scientific Research and Development Services	4,640	0.72	$61.41	$127,730
Software Publishers	1,610	0.44	$66.33	$137,970
Federal Executive Branch (OES Designation)	7,630	0.38	$51.88	$107,910
Computer Systems Design and Related Services	6,000	0.30	$58.03	$120,700
Professional and Commercial Equipment and Supplies Merchant Wholesalers	930	0.15	$70.41	$146,440

Geographic profile for this occupation

States and areas with the highest published employment, location quotients, and wages for this occupation are provided.

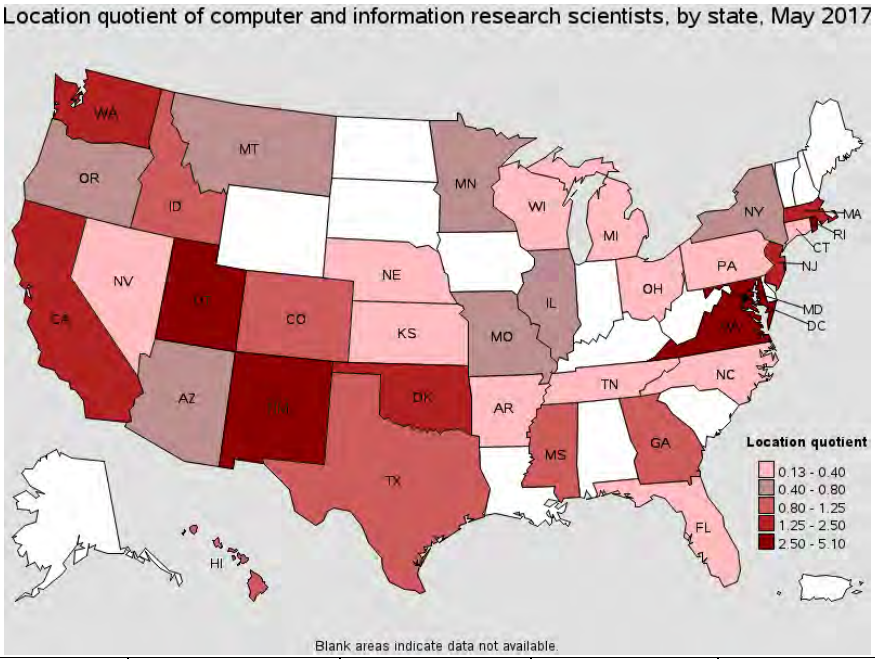
States with the highest employment level in this occupation:



State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)

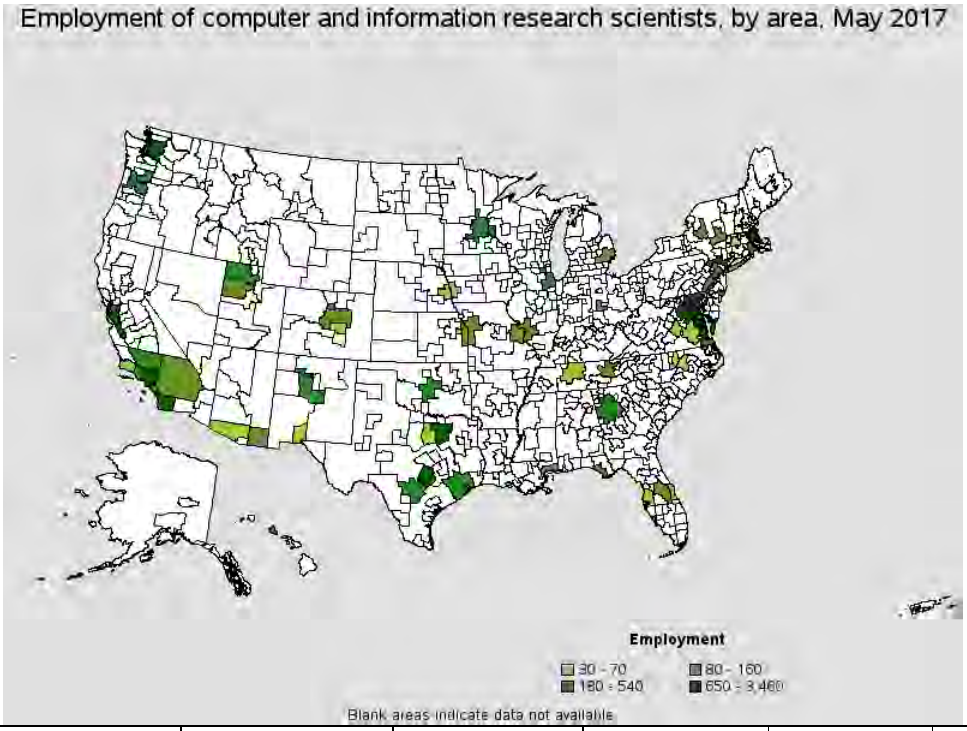
California	5,750	0.34	1.76	$61.80	$128,530
Virginia	2,670	0.70	3.60	$62.00	$128,950
Maryland	2,660	1.00	5.10	$52.74	$109,700
Texas	2,170	0.18	0.93	$50.87	$105,800
Washington	1,340	0.42	2.15	$65.02	$135,240

States with the highest concentration of jobs and location quotients in this occupation:



State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Maryland	2,660	1.00	5.10	$52.74	$109,700
New Mexico	750	0.94	4.79	$63.56	$132,210
Rhode Island	410	0.86	4.39	$52.83	$109,880
Virginia	2,670	0.70	3.60	$62.00	$128,950
District of Columbia	450	0.64	3.26	$63.45	$131,980

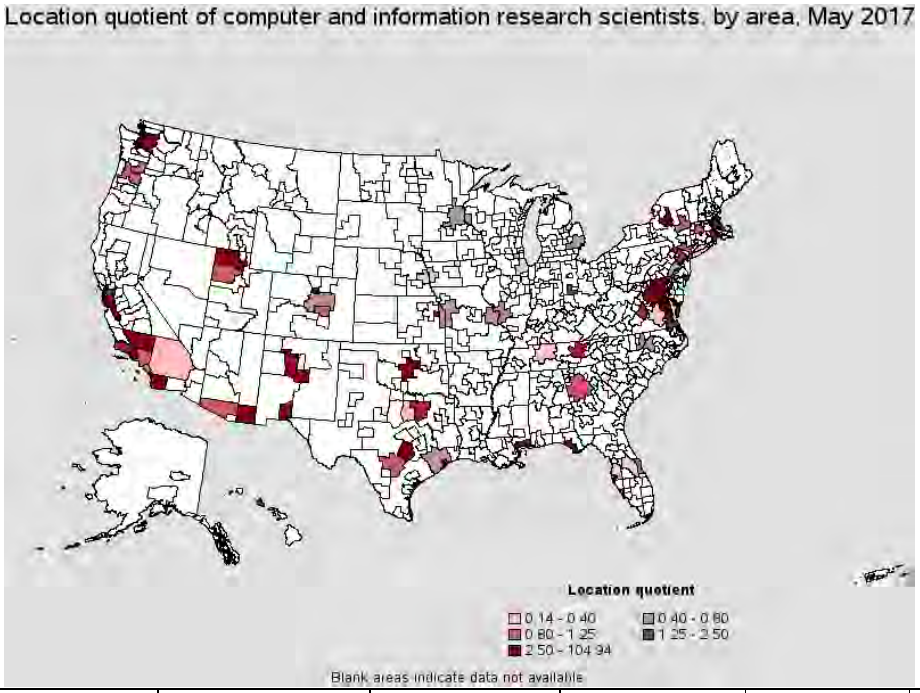
Metropolitan areas with the highest employment level in this occupation:



< Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	2,610	1.04	5.29	$62.96	$130,970
San Jose-Sunnyvale-Santa Clara, CA	1,260	1.16	5.93	$76.05	$158,170
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	1,250	0.19	0.96	$65.50	$136,230
Seattle-Bellevue-Everett, WA Metropolitan Division	1,070	0.65	3.31	$69.48	$144,530
Los Angeles-Long Beach-Glendale, CA Metropolitan Division	1,040	0.23	1.20	$60.42	$125,660
San Francisco-Redwood City-South San Francisco, CA Metropolitan Division	990	0.89	4.54	$62.31	$129,600
San Diego-Carlsbad, CA	940	0.65	3.34	$56.97	$118,500

Baltimore-Columbia-Towson, MD	900	0.66	3.39	$54.86	$114,110
Silver Spring-Frederick-Rockville, MD Metropolitan Division	850	1.46	7.44	$52.32	$108,820

Metropolitan areas with the highest concentration of jobs and location quotients in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
California-Lexington Park, MD	310	6.79	34.68	$54.37	$113,080
Sierra Vista-Douglas, AZ	80	2.52	12.86	$50.67	$105,390
Atlantic City-Hammonton, NJ	240	1.92	9.79	$57.06	$118,680
Ogden-Clearfield, UT	390	1.56	7.98	$39.96	$83,130
Silver Spring-Frederick-Rockville, MD Metropolitan Division	850	1.46	7.44	$52.32	$108,820
Panama City, FL	110	1.35	6.88	$51.60	$107,330

San Jose-Sunnyvale-Santa Clara, CA	1,260	1.16	5.93	$76.05	$158,170
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	2,610	1.04	5.29	$62.96	$130,970
Las Cruces, NM	70	1.01	5.14	$42.68	$88,770
Bremerton-Silverdale, WA	90	1.01	5.17	$43.39	$90,250

Occupational Employment and Wages, May 2017

25-1021 Computer Science Teachers, Postsecondary

Teach courses in computer science. May specialize in a field of computer science, such as the design and function of computers or operations and research analysis. Includes both teachers primarily engaged in teaching and those who do a combination of teaching and research.

National estimates for this occupation

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Mean wage RSE (3)
32,230	2.0 %	(4)	$91,590	1.1 %

Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Annual Wage (2)	$41,270	$56,070	$78,630	$113,930	$159,180

(4)

Industry profile for this occupation

Industries with the highest published employment and wages for this occupation are provided.

Industries with the highest levels of employment in this occupation:

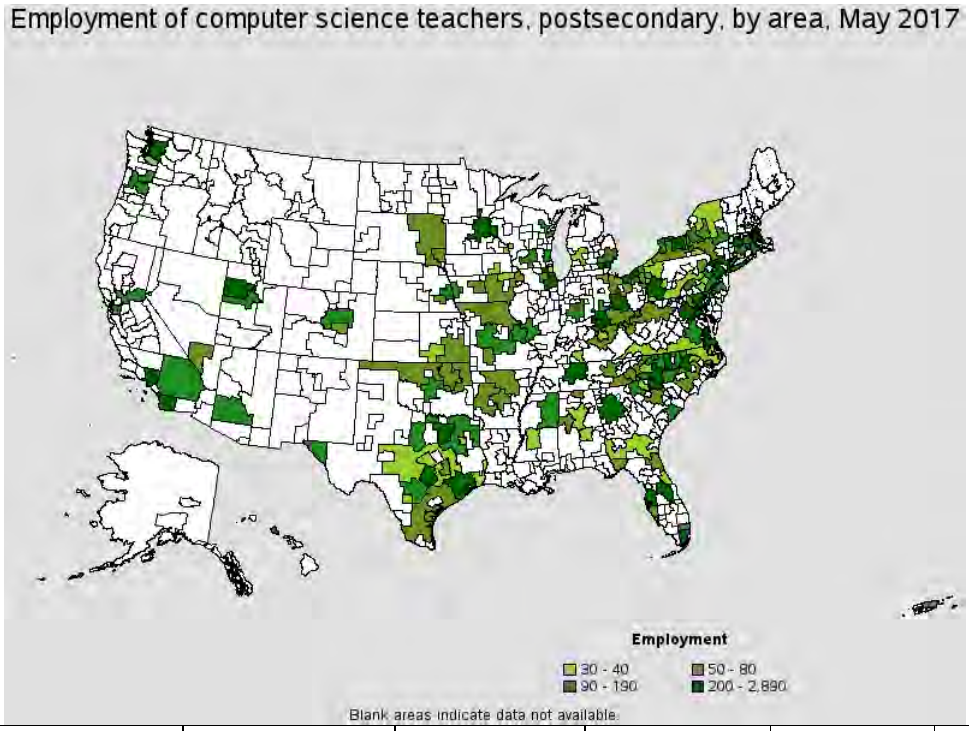
Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Colleges, Universities, and Professional Schools	20,470	0.68	(4)	$97,460
Junior Colleges	10,950	1.49	(4)	$79,590
Business Schools and Computer and Management Training	420	0.60	(4)	$141,860
Technical and Trade Schools	320	0.24	(4)	$64,660

Industries with the highest concentration of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Junior Colleges	10,950	1.49	(4)	$79,590

Colleges, Universities, and Professional Schools	20,470	0.68	(4)	$97,460
Business Schools and Computer and Management Training	420	0.60	(4)	$141,860
Technical and Trade Schools	320	0.24	(4)	$64,660

Metropolitan areas with the highest employment level in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	2,060	0.31	1.36	(4)	$109,380
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	900	0.36	1.59	(4)	$118,600
Los Angeles-Long Beach-Glendale, CA Metropolitan Division	860	0.19	0.86	(4)	$116,680
Chicago-Naperville-Arlington Heights, IL Metropolitan Division	770	0.21	0.93	(4)	$92,750

Miami-Miami Beach-Kendall, FL Metropolitan Division	540	0.47	2.08	(4)	$72,650
Houston-The Woodlands-Sugar Land, TX	470	0.16	0.71	(4)	$107,840
Boston-Cambridge-Newton, MA NECTA Division	460	0.25	1.10	(4)	$111,330
Orlando-Kissimmee-Sanford, FL	450	0.37	1.63	(4)	$78,300
Virginia Beach-Norfolk-Newport News, VA-NC	420	0.56	2.47	(8)	(8)
Pittsburgh, PA	400	0.35	1.56	(4)	$77,570

Occupational Employment and Wages, May 2017

25-1011 Business Teachers, Postsecondary

Teach courses in business administration and management, such as accounting, finance, human resources, labor and industrial relations, marketing, and operations research. Includes both teachers primarily engaged in teaching and those who do a combination of teaching and research.

National estimates for this occupation

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Mean wage RSE (3)
84,340	1.5 %	(4)	$100,270	1.2 %

Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Annual Wage (2)	$37,170	$53,150	$80,300	$125,780	$191,760

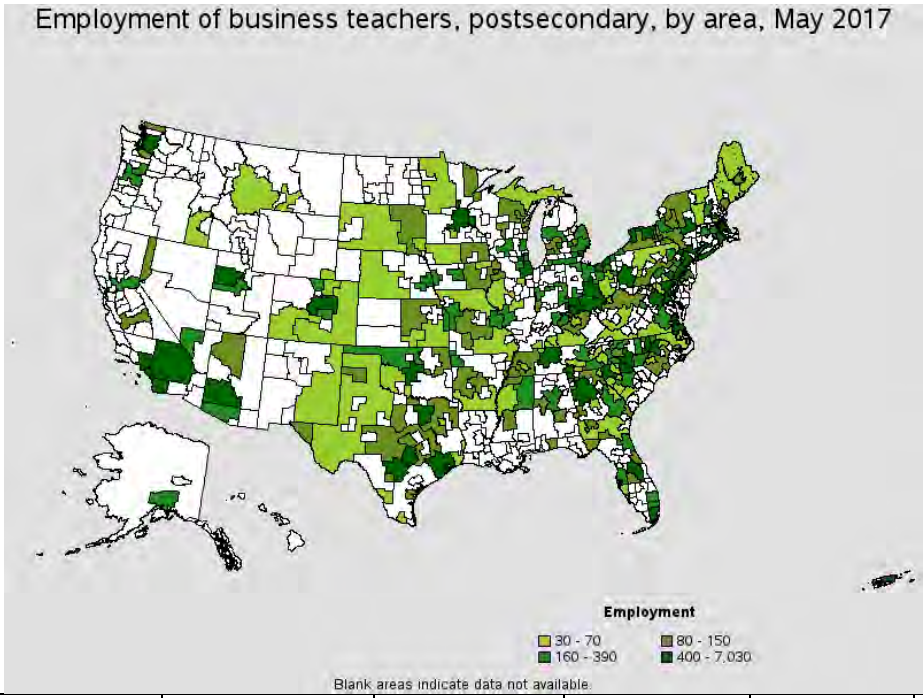
Industry profile for this occupation

Industries with the highest published employment and wages for this occupation are provided.

Industries with the highest levels of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Colleges, Universities, and Professional Schools	64,620	2.14	(4)	$106,010
Junior Colleges	18,790	2.55	(4)	$82,470
Business Schools and Computer and Management Training	480	0.68	(4)	$65,070
Technical and Trade Schools	360	0.27	(4)	$55,430
Educational Support Services	40	0.02	(4)	$51,560

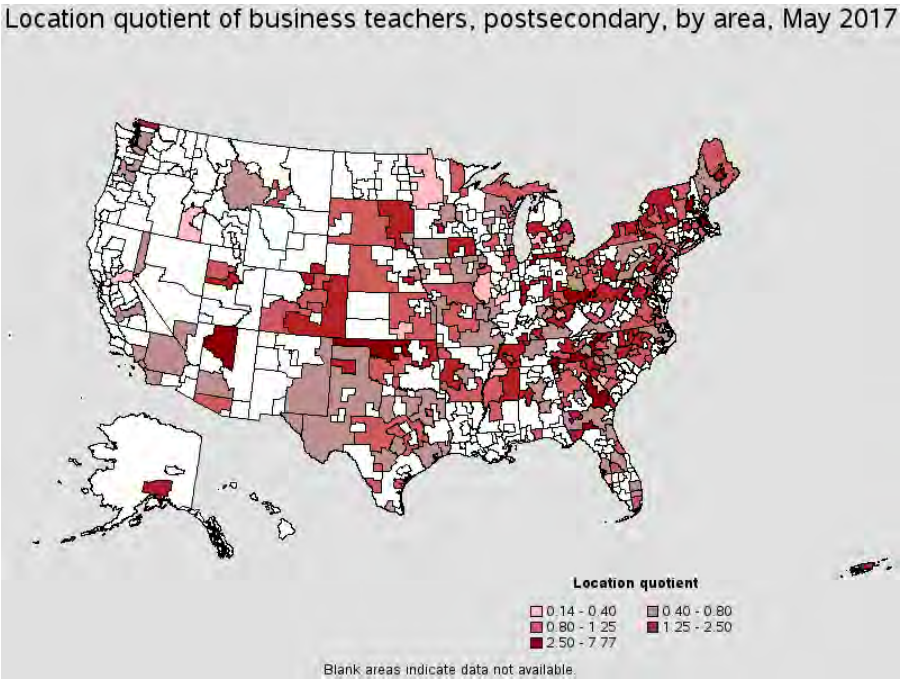
Metropolitan areas with the highest employment level in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	4,910	0.73	1.24	(4)	$116,410
Boston-Cambridge-Newton, MA NECTA Division	2,970	1.61	2.72	(8)	(8)
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	2,690	1.07	1.80	(4)	$109,800
Philadelphia, PA Metropolitan Division	2,020	2.23	3.77	(4)	$95,280
Chicago-Naperville-Arlington Heights, IL Metropolitan Division	1,950	0.53	0.90	(4)	$124,430
Atlanta-Sandy Springs-Roswell, GA	1,440	0.55	0.93	(4)	$83,830
Pittsburgh, PA	1,320	1.16	1.97	(4)	$80,940
Los Angeles-Long Beach-Glendale, CA Metropolitan Division	1,270	0.29	0.49	(8)	(8)

Houston-The Woodlands-Sugar Land, TX	1,230	0.42	0.71	(4)	$106,190
Dallas-Plano-Irving, TX Metropolitan Division	880	0.35	0.59	(8)	(8)

Metropolitan areas with the highest employment level in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean age	Annual mean wage (2)
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	4,910	0.73	1.24	(4)	$116,410
Boston-Cambridge-Newton, MA NECTA Division	2,970	1.61	2.72	(8)	(8)
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	2,690	1.07	1.80	(4)	$109,800
Philadelphia, PA Metropolitan Division	2,020	2.23	3.77	(4)	$95,280

Chicago-Naperville-Arlington Heights, IL Metropolitan Division	1,950	0.53	0.90	(4)	$124,430
Atlanta-Sandy Springs-Roswell, GA	1,440	0.55	0.93	(4)	$83,830
Pittsburgh, PA	1,320	1.16	1.97	(4)	$80,940
Los Angeles-Long Beach-Glendale, CA Metropolitan Division	1,270	0.29	0.49	(8)	(8)
Houston-The Woodlands-Sugar Land, TX	1,230	0.42	0.71	(4)	$106,190
Dallas-Plano-Irving, TX Metropolitan Division	880	0.35	0.59	(8)	(8)

Occupational Employment and Wages, May 2017

11-3021 Computer and Information Systems Managers

Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming. Excludes "Computer Occupations" (15-1111 through 15-1199).

National estimates for this occupation

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
365,690	0.8 %	$71.99	$149,730	0.4 %

Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	$40.32	$51.80	$66.93	$84.56	(5)
Annual Wage (2)	$83,860	$107,740	$139,220	$175,890	(5)

Industry profile for this occupation

Industries with the highest published employment and wages for this occupation are provided.

Industries with the highest levels of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Computer Systems Design and Related Services	81,090	4.02	$76.04	$158,160
Management of Companies and Enterprises	37,150	1.60	$73.06	$151,960
Management, Scientific, and Technical Consulting Services	14,640	1.07	$76.27	$158,640
Software Publishers	13,430	3.66	$79.37	$165,090
Insurance Carriers	13,070	1.12	$72.75	$151,320

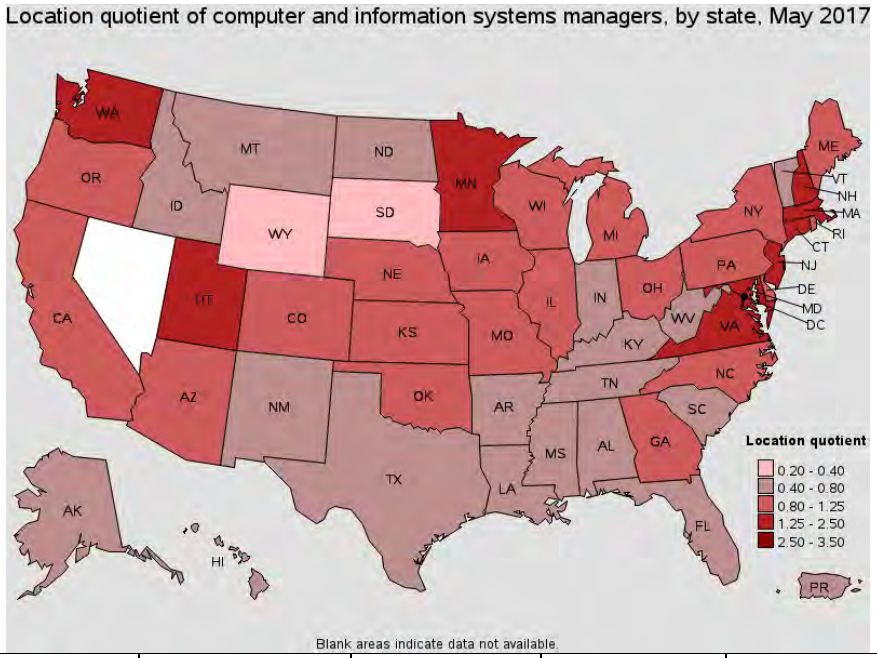
Industries with the highest concentration of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Computer Systems Design and Related Services	81,090	4.02	$76.04	$158,160
Software Publishers	13,430	3.66	$79.37	$165,090
Other Information Services	9,080	3.28	$88.85	$184,810
Data Processing, Hosting, and Related Services	9,370	3.05	$75.11	$156,220
Monetary Authorities-Central Bank	380	2.11	$81.12	$168,730

Geographic profile for this occupation:

States and areas with the highest published employment, location quotients, and wages for this occupation are provided.

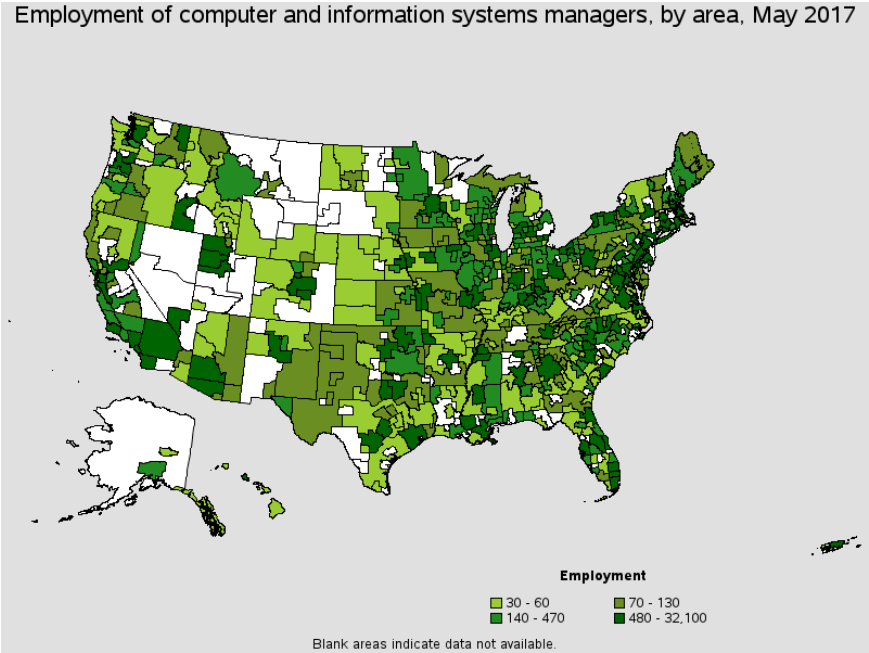
States with the highest concentration of jobs and location quotients in this occupation:



State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
District of Columbia	4,060	5.74	2.24	$78.99	$164,310
Connecticut	8,060	4.87	1.90	$71.03	$147,740
Massachusetts	16,310	4.62	1.80	$73.96	$153,830

Washington	12,590	3.95	1.54	$74.42	$154,790
Maryland	9,920	3.72	1.45	$72.38	$150,540

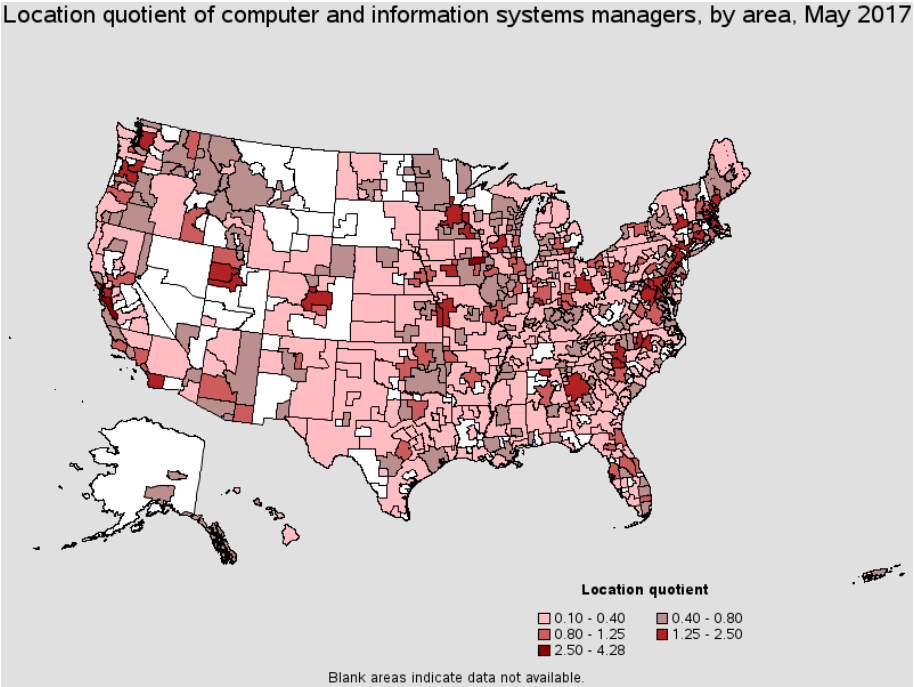
Metropolitan areas with the highest employment level in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	24,320	3.63	1.42	$95.73	$199,130
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	14,920	5.92	2.31	$83.11	$172,880
San Jose-Sunnyvale-Santa Clara, CA	11,950	10.97	4.28	$98.16	$204,180
Atlanta-Sandy Springs-Roswell, GA	11,410	4.35	1.70	$68.71	$142,910
Boston-Cambridge-Newton, MA NECTA Division	11,400	6.19	2.41	$76.14	$158,370

Chicago-Naperville-Arlington Heights, IL Metropolitan Division	11,140	3.04	1.19	$68.31	$142,090
Seattle-Bellevue-Everett, WA Metropolitan Division	10,340	6.28	2.45	$78.00	$162,230
Los Angeles-Long Beach-Glendale, CA Metropolitan Division	10,340	2.33	0.91	$78.40	$163,070
San Francisco-Redwood City-South San Francisco, CA Metropolitan Division	8,760	7.85	3.06	$96.68	$201,100
Minneapolis-St. Paul-Bloomington, MN-WI	8,000	4.14	1.61	$70.41	$146,450

Metropolitan areas with the highest concentration of jobs and location quotients in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
San Jose-Sunnyvale-Santa Clara, CA	11,950	10.97	4.28	$98.16	$204,180

San Francisco-Redwood City-South San Francisco, CA Metropolitan Division	8,760	7.85	3.06	$96.68	$201,100
Cedar Rapids, IA	1,060	7.54	2.94	$62.37	$129,730
Lowell-Billerica-Chelmsford, MA-NH NECTA Division	1,150	7.42	2.89	$72.93	$151,700
Seattle-Bellevue-Everett, WA Metropolitan Division	10,340	6.28	2.45	$78.00	$162,230
Framingham, MA NECTA Division	1,080	6.25	2.44	$78.51	$163,310
Boston-Cambridge-Newton, MA NECTA Division	11,400	6.19	2.41	$76.14	$158,370
California-Lexington Park, MD	280	6.06	2.36	$71.15	$147,990
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	14,920	5.92	2.31	$83.11	$172,880
Hartford-West Hartford-East Hartford, CT	3,210	5.52	2.15	$69.23	$144,010

Occupational Employment and Wages, May 2017

15-1121 Computer Systems Analysts

Analyze science, engineering, business, and other data processing problems to implement and improve computer systems. Analyze user requirements, procedures, and problems to automate or improve existing systems and review computer system capabilities, workflow, and scheduling limitations. May analyze or recommend commercially available software.

National estimates for this occupation

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
581,960	1.0 %	$44.59	$92,740	0.3 %

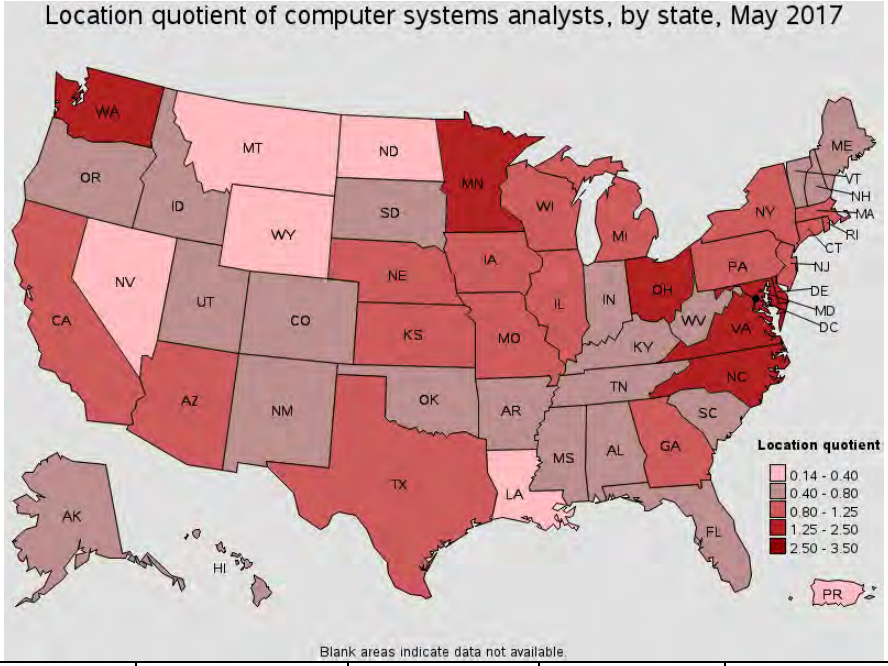
Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	$25.84	$32.82	$42.44	$54.11	$67.24
Annual Wage (2)	$53,750	$68,260	$88,270	$112,540	$139,850

Industries with the highest levels of employment in this occupation:

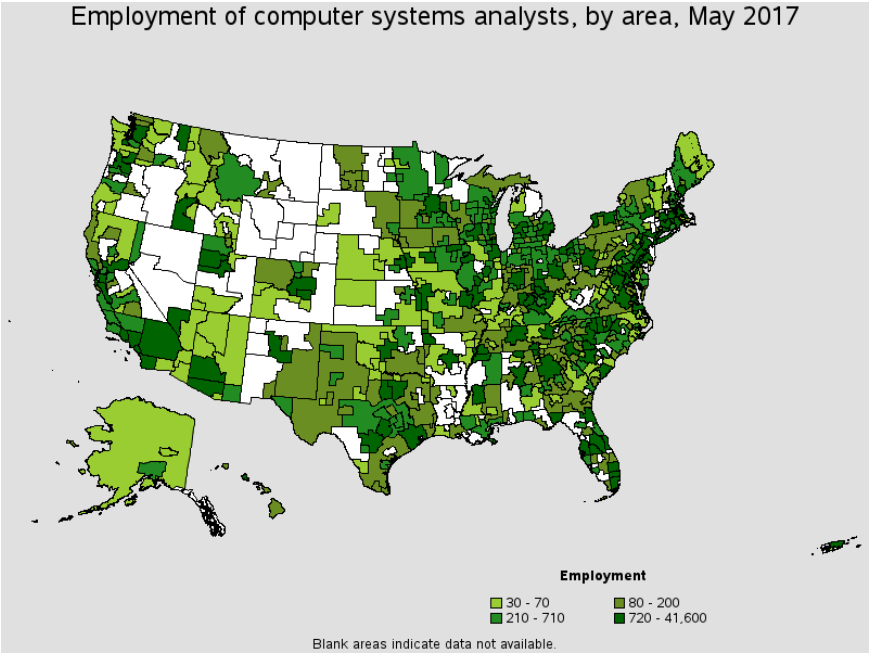
Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Computer Systems Design and Related Services	179,330	8.90	$46.84	$97,420
Management of Companies and Enterprises	56,220	2.42	$44.48	$92,520
Insurance Carriers	28,950	2.48	$42.31	$88,010
Management, Scientific, and Technical Consulting Services	23,420	1.71	$45.78	$95,230
State Government, excluding schools and hospitals (OES Designation)	21,490	0.98	$36.25	$75,400

States with the highest concentration of jobs and location quotients in this occupation:



State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Virginia	27,760	7.32	1.79	$48.12	$100,090
Delaware	2,950	6.66	1.63	$46.36	$96,440
Maryland	17,220	6.46	1.58	$46.97	$97,700
District of Columbia	4,260	6.01	1.47	$50.47	$104,970
Minnesota	16,630	5.86	1.44	$43.86	$91,230

Metropolitan areas with the highest employment level in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	32,970	4.93	1.21	$55.18	$114,760
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	24,000	9.53	2.33	$50.09	$104,180
Dallas-Plano-Irving, TX Metropolitan Division	19,950	8.01	1.96	$47.06	$97,880
Chicago-Naperville-Arlington Heights, IL Metropolitan Division	17,990	4.91	1.20	$43.53	$90,550
Houston-The Woodlands-Sugar Land, TX	14,990	5.12	1.25	$48.63	$101,150
Minneapolis-St. Paul-Bloomington, MN-WI	14,780	7.65	1.87	$44.79	$93,150
Los Angeles-Long Beach-Glendale, CA Metropolitan Division	14,450	3.26	0.80	$45.20	$94,020
Atlanta-Sandy Springs-Roswell, GA	13,930	5.32	1.30	$43.46	$90,400

San Jose-Sunnyvale-Santa Clara, CA	13,600	12.49	3.06	$56.74	$118,010
Seattle-Bellevue-Everett, WA Metropolitan Division	12,840	7.80	1.91	$48.02	$99,870

Occupational Employment and Wages, May 2017

19-3099 Social Scientists and Related Workers, All Other

All social scientists and related workers not listed separately.

National estimates for this occupation

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
35,490	2.9 %	$40.01	$83,230	1.0 %

Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	$23.36	$29.84	$38.16	$49.06	$59.25
Annual Wage (2)	$48,580	$62,070	$79,370	$102,040	$123,230

Industry profile for this occupation

Industries with the highest published employment and wages for this occupation are provided.

Industries with the highest levels of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Federal Executive Branch (OES Designation)	17,710	0.87	$42.06	$87,490
Colleges, Universities, and Professional Schools	4,590	0.15	$30.68	$63,810
Scientific Research and Development Services	3,780	0.58	$42.53	$88,460
Management, Scientific, and Technical Consulting Services	2,570	0.19	$47.80	$99,430
State Government, excluding schools and hospitals (OES Designation)	1,720	0.08	$33.30	$69,270

Industries with the highest concentration of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Federal Executive Branch (OES Designation)	17,710	0.87	$42.06	$87,490
Scientific Research and Development Services	3,780	0.58	$42.53	$88,460
Educational Support Services	860	0.49	$43.32	$90,100
Management, Scientific, and Technical Consulting Services	2,570	0.19	$47.80	$99,430
Colleges, Universities, and Professional Schools	4,590	0.15	$30.68	$63,810

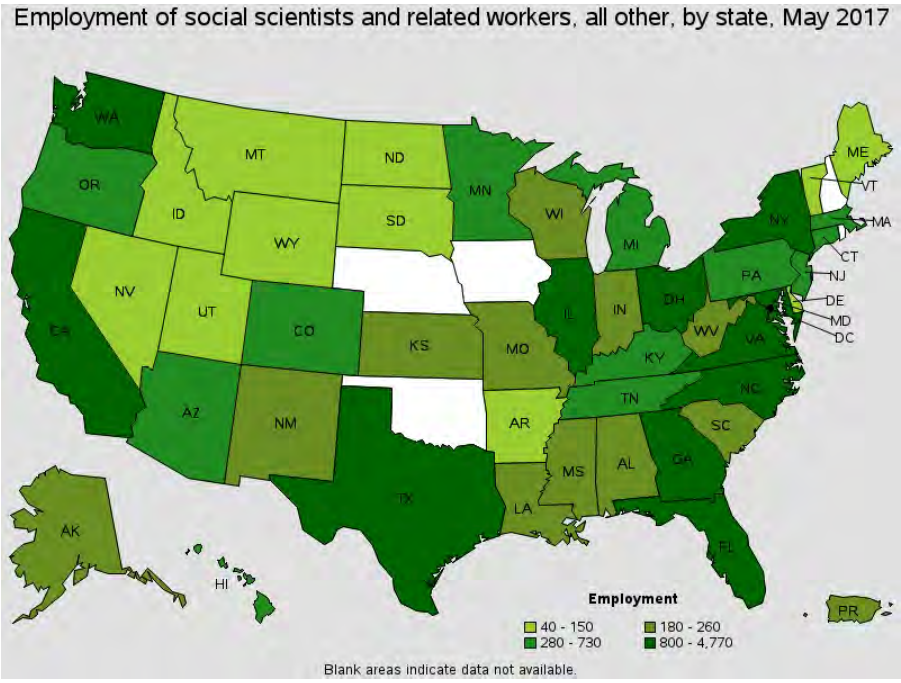
Top paying industries for this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Computer Systems Design and Related Services	150	0.01	$50.36	$104,740
Rail Transportation	60	0.03	$49.33	$102,610
Architectural, Engineering, and Related Services	260	0.02	$48.01	$99,870
Management, Scientific, and Technical Consulting Services	2,570	0.19	$47.80	$99,430
Grantmaking and Giving Services	50	0.03	$46.57	$96,870

Geographic profile for this occupation

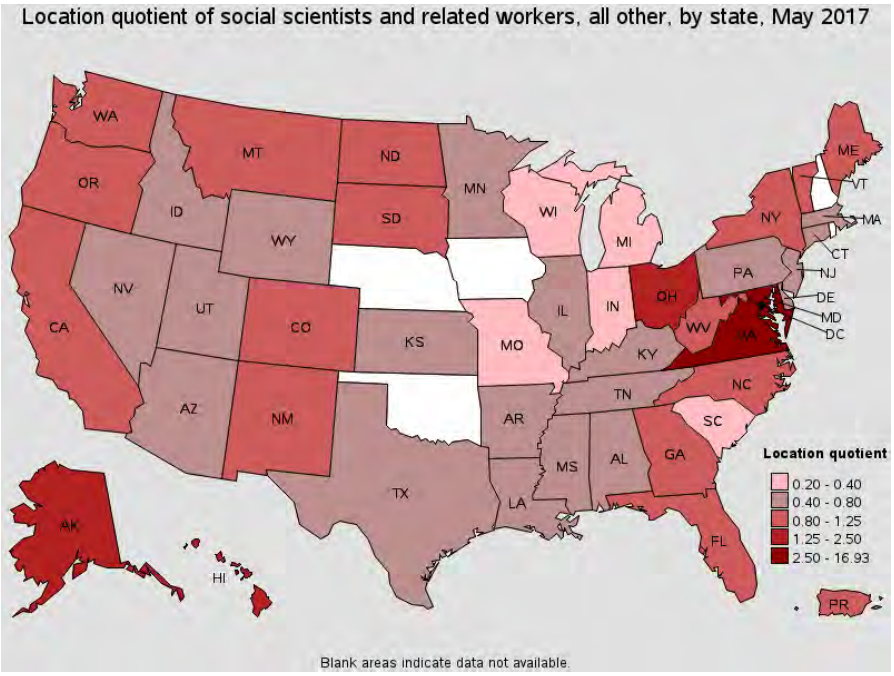
States and areas with the highest published employment, location quotients, and wages for this occupation are provided.

States with the highest employment level in this occupation:



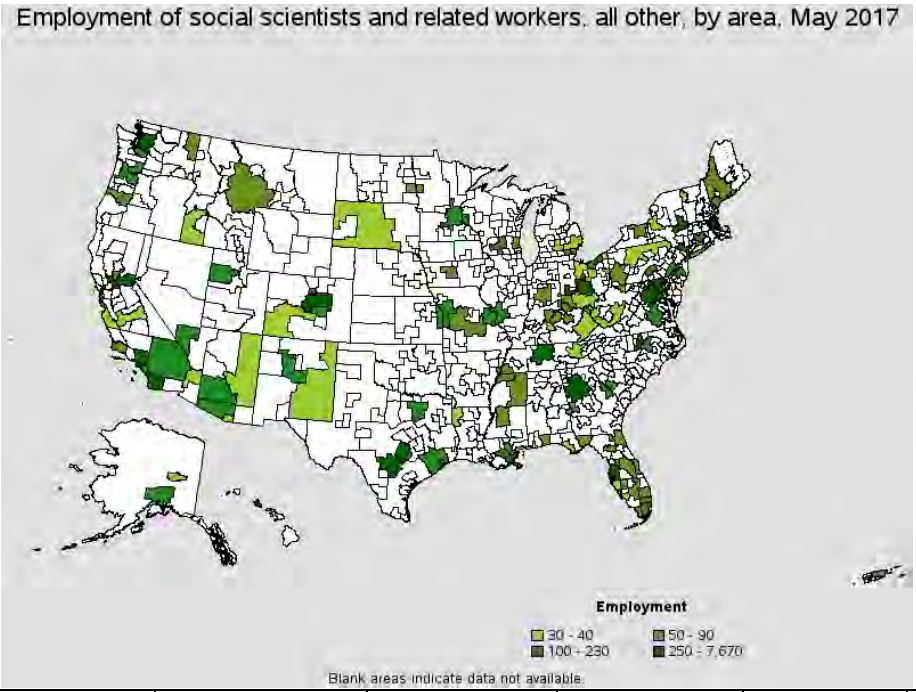
State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Virginia	4,770	1.26	5.05	$51.54	$107,210
California	4,330	0.26	1.04	$35.11	$73,040
District of Columbia	2,980	4.21	16.93	$48.60	$101,080
New York	2,210	0.24	0.96	$39.76	$82,690
Maryland	2,120	0.79	3.19	$45.88	$95,440

States with the highest concentration of jobs and location quotients in this occupation:



State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
District of Columbia	2,980	4.21	16.93	$48.60	$101,080
Virginia	4,770	1.26	5.05	$51.54	$107,210
Maryland	2,120	0.79	3.19	$45.88	$95,440
Alaska	200	0.61	2.47	$36.21	$75,310
Hawaii	330	0.52	2.09	$43.89	$91,300

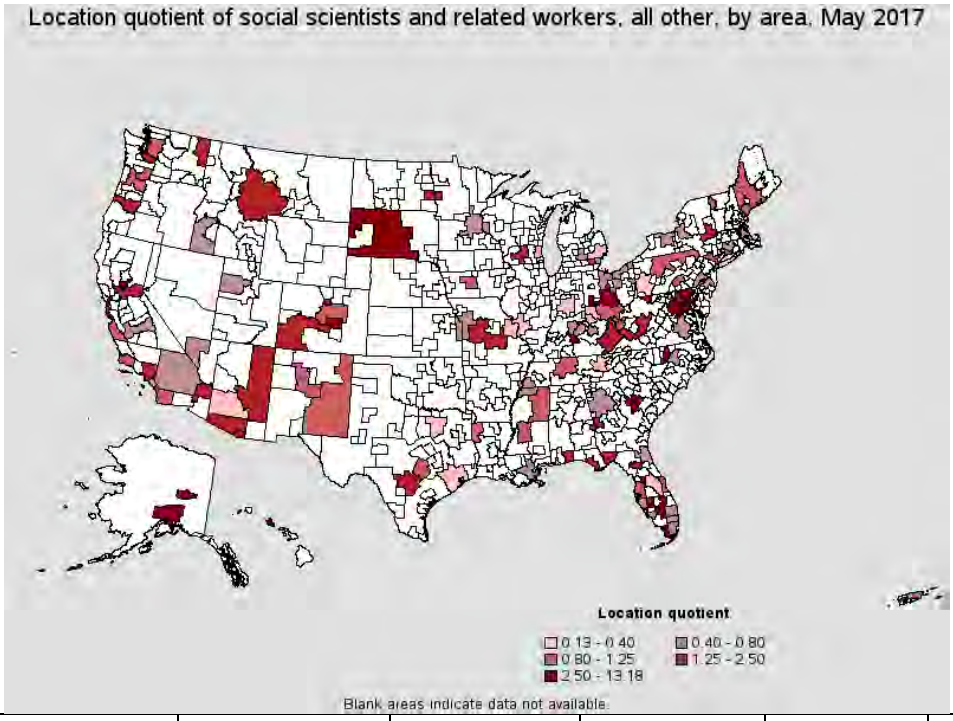
Metropolitan areas with the highest employment level in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	7,310	2.90	11.66	$51.78	$107,700
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	1,700	0.25	1.02	$40.30	$83,820
Los Angeles-Long Beach-Glendale, CA Metropolitan Division	1,540	0.35	1.40	$31.25	$65,000
Baltimore-Columbia-Towson, MD	1,020	0.75	3.01	$42.42	$88,240
Columbus, OH	700	0.68	2.73	$31.23	$64,970
Durham-Chapel Hill, NC	640	2.14	8.61	$29.44	$61,230
Dayton, OH	600	1.62	6.52	$41.03	$85,340
San Antonio-New Braunfels, TX	580	0.57	2.30	$38.34	$79,750
Sacramento--Roseville--Arden-Arcade, CA	470	0.49	1.98	$34.31	$71,370

Seattle-Bellevue-Everett, WA Metropolitan Division	460	0.28	1.12	$34.39	$71,530

Metropolitan areas with the highest concentration of jobs and location quotients in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
The Villages, FL	90	3.28	13.18	$34.16	$71,050
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	7,310	2.90	11.66	$51.78	$107,700
Durham-Chapel Hill, NC	640	2.14	8.61	$29.44	$61,230
Dayton, OH	600	1.62	6.52	$41.03	$85,340
Yuba City, CA	50	1.22	4.88	$36.76	$76,470
Fairbanks, AK	40	1.17	4.71	$33.89	$70,490
Augusta-Richmond County, GA-SC	230	1.06	4.25	$41.30	$85,900
Morgantown, WV	70	1.01	4.06	$33.09	$68,840
Elizabethtown-Fort Knox, KY	40	0.82	3.28	$32.57	$67,750

Baltimore-Columbia-Towson, MD	1,020	0.75	3.01	$42.42	$88,240

Occupational Employment and Wages, May 2017

15-2041 Statisticians

Develop or apply mathematical or statistical theory and methods to collect, organize, interpret, and summarize numerical data to provide usable information. May specialize in fields such as bio-statistics, agricultural statistics, business statistics, or economic statistics. Includes mathematical and survey statisticians. Excludes "Survey Researchers" (19-3022).

National estimates for this occupation

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
36,540	2.2 %	$42.78	$88,980	0.7 %

Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	$24.36	$30.88	$40.41	$52.16	$64.29
Annual Wage (2)	$50,660	$64,230	$84,060	$108,500	$133,720

Industry profile for this occupation

Industries with the highest published employment and wages for this occupation are provided.

Industries with the highest levels of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Scientific Research and Development Services	5,470	0.85	$46.53	$96,780
Federal Executive Branch (OES Designation)	4,470	0.22	$50.05	$104,100
Management, Scientific, and Technical Consulting Services	3,040	0.22	$43.85	$91,220
State Government, excluding schools and hospitals (OES Designation)	2,700	0.12	$30.70	$63,860
General Medical and Surgical Hospitals	2,630	0.05	$39.80	$82,790

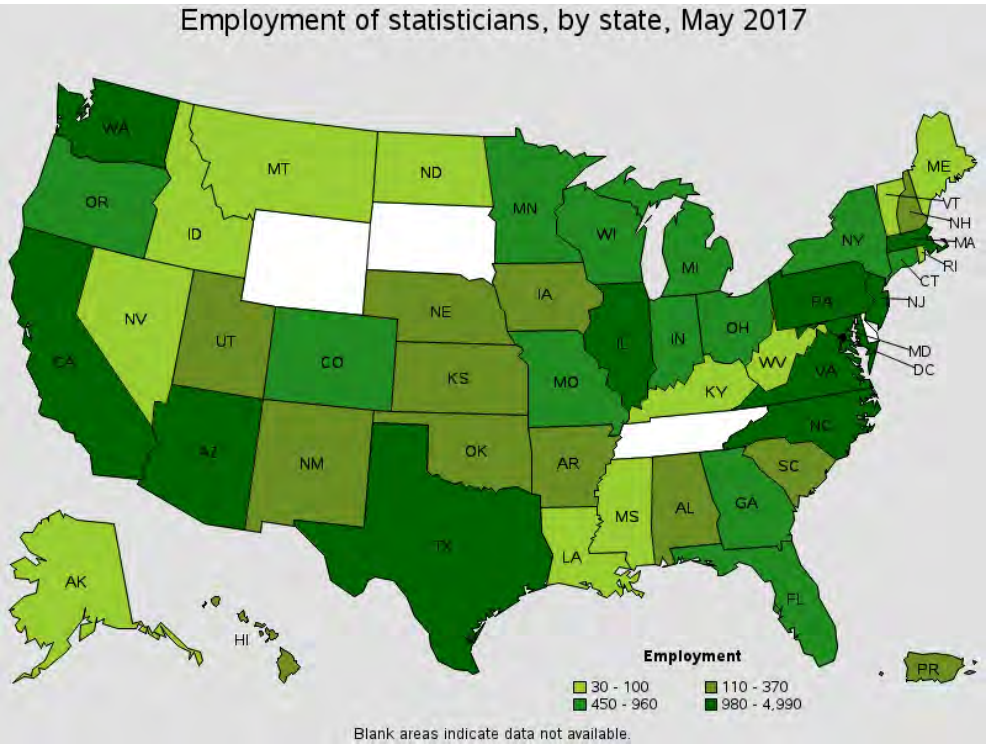
Industries with the highest concentration of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Monetary Authorities-Central Bank	160	0.89	$52.20	$108,570
Scientific Research and Development Services	5,470	0.85	$46.53	$96,780
Pharmaceutical and Medicine Manufacturing	970	0.34	$50.97	$106,010
Federal Executive Branch (OES Designation)	4,470	0.22	$50.05	$104,100
Management, Scientific, and Technical Consulting Services	3,040	0.22	$43.85	$91,220

Geographic profile for this occupation

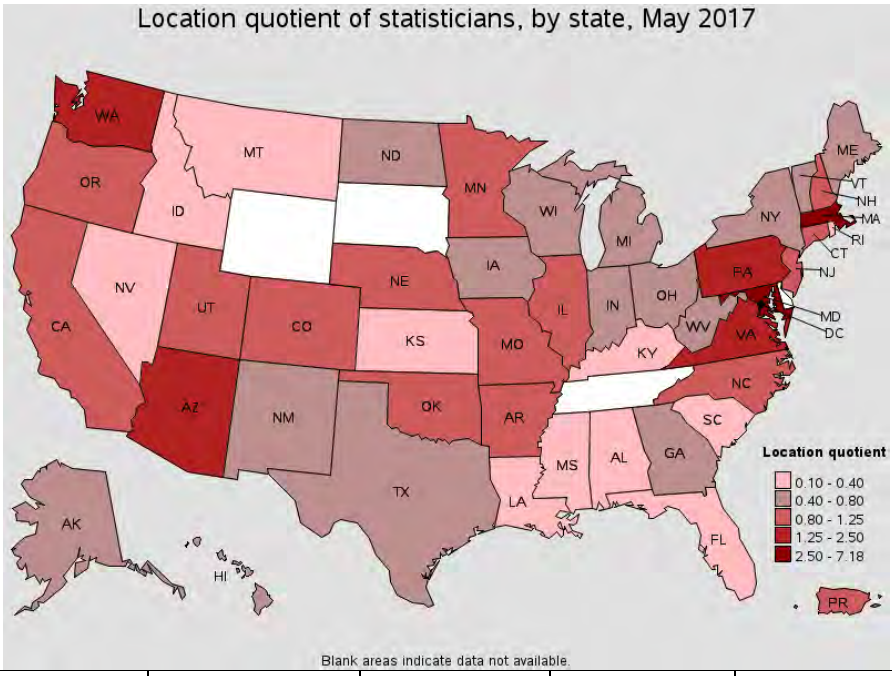
States and areas with the highest published employment, location quotients, and wages for this occupation are provided.

States with the highest employment level in this occupation:



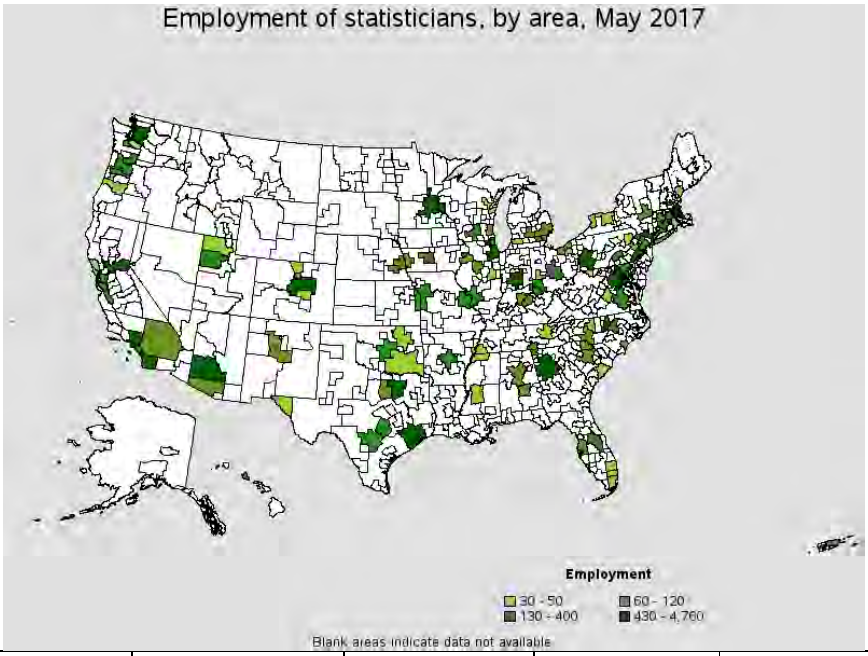
State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
California	4,990	0.30	1.17	$45.30	$94,230
Pennsylvania	3,330	0.58	2.25	$37.84	$78,700
Maryland	3,070	1.15	4.49	$49.23	$102,410
Massachusetts	2,920	0.83	3.23	$47.86	$99,550
Texas	1,690	0.14	0.55	$38.56	$80,210

States with the highest concentration of jobs and location quotients in this occupation:



State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
District of Columbia	1,300	1.84	7.18	$51.02	$106,110
Maryland	3,070	1.15	4.49	$49.23	$102,410
Massachusetts	2,920	0.83	3.23	$47.86	$99,550
Pennsylvania	3,330	0.58	2.25	$37.84	$78,700
Arizona	980	0.36	1.42	$36.44	$75,800

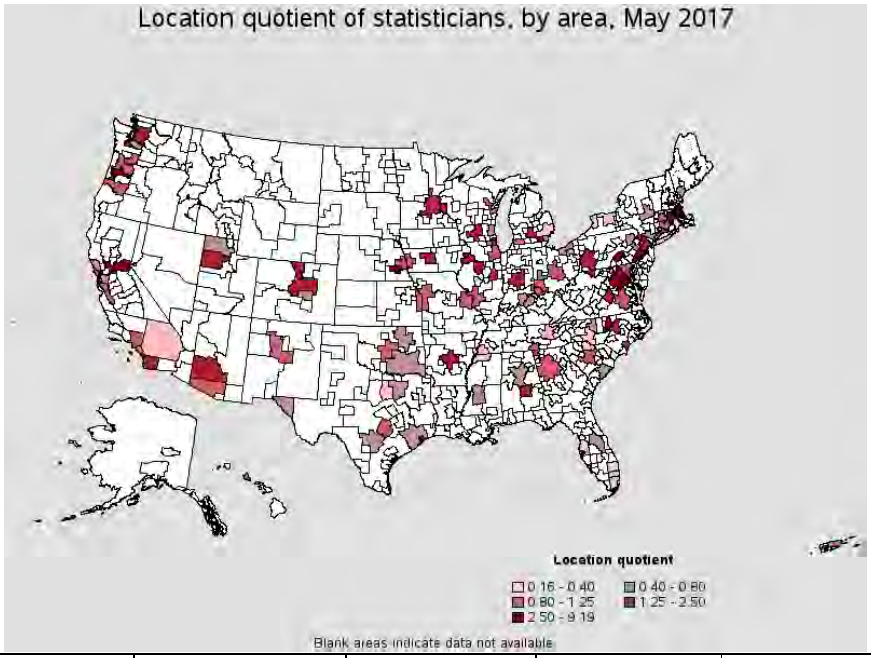
Metropolitan areas with the highest employment level in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	3,860	1.53	5.97	$48.31	$100,490
Boston-Cambridge-Newton, MA NECTA Division	2,290	1.24	4.85	$49.15	$102,240
Montgomery County-Bucks County-Chester County, PA Metropolitan Division	1,460	1.41	5.50	$40.89	$85,050
Sacramento--Roseville--Arden-Arcade, CA	1,060	1.10	4.29	$36.37	$75,660
Chicago-Naperville-Arlington Heights, IL Metropolitan Division	980	0.27	1.04	$39.11	$81,360
Los Angeles-Long Beach-Glendale, CA Metropolitan Division	950	0.21	0.84	$39.54	$82,240
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	910	0.14	0.53	$50.59	$105,230

Silver Spring-Frederick-Rockville, MD Metropolitan Division	900	1.55	6.03	$54.48	$113,320
Phoenix-Mesa-Scottsdale, AZ	850	0.43	1.68	$36.00	$74,880
San Francisco-Redwood City-South San Francisco, CA Metropolitan Division	820	0.74	2.88	$58.56	$121,800

Metropolitan areas with the highest concentration of jobs and location quotients in this occupation:



Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Durham-Chapel Hill, NC	700	2.36	9.19	$48.64	$101,180
Silver Spring-Frederick-Rockville, MD Metropolitan Division	900	1.55	6.03	$54.48	$113,320
Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Division	3,860	1.53	5.97	$48.31	$100,490

Montgomery County-Bucks County-Chester County, PA Metropolitan Division	1,460	1.41	5.50	$40.89	$85,050
Trenton, NJ	310	1.35	5.26	$51.01	$106,110
Boston-Cambridge-Newton, MA NECTA Division	2,290	1.24	4.85	$49.15	$102,240
Salem, OR	190	1.16	4.53	$34.47	$71,690
Olympia-Tumwater, WA	120	1.12	4.35	(8)	(8)
Sacramento--Roseville--Arden-Arcade, CA	1,060	1.10	4.29	$36.37	$75,660
Ann Arbor, MI	210	0.98	3.82	$37.12	$77,220

About May 2017 National, State, Metropolitan, and Nonmetropolitan Area Occupational Employment and Wage Estimates

These estimates are calculated with data collected from employers in all industry sectors, all metropolitan and nonmetropolitan areas, and all states and the District of Columbia. The top employment and wage figures are provided above. The percentile wage estimate is the value of a wage below which a certain percent of workers fall. The median wage is the 50th percentile wage estimate--50 percent of workers earn less than the median and 50 percent of workers earn more than the median. (1) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers. (2) Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly wage published, the annual wage has been directly calculated from the reported survey data. (3) The relative standard error (RSE) is a measure of the reliability of a survey statistic. The smaller the relative standard error, the more precise the estimate. (5) This wage is equal to or greater than $100.00 per hour or $208,000 per year. (8) Estimate not released. (9) The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.

Occupational Employment and Wages, May 2017

41-3031 Securities, Commodities, and Financial Services Sales Agents

Buy and sell securities or commodities in investment and trading firms, or provide financial services to businesses and individuals. May advise customers about stocks, bonds, mutual funds, commodities, and market conditions.

National estimates for this occupation
Industry profile for this occupation
Geographic profile for this occupation

National estimates for this occupation: Top

Employment estimate and mean wage estimates for this occupation:

Employment (1)	Employment RSE (3)	Mean hourly wage	Mean annual wage (2)	Wage RSE (3)
389,610	1.1 %	$46.85	$97,440	1.4 %

Percentile wage estimates for this occupation:

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	$15.89	$19.55	$30.66	$58.63	(5)
Annual Wage (2)	$33,060	$40,670	$63,780	$121,960	(5)

Industry profile for this occupation: Top

Industries with the highest published employment and wages for this occupation are provided. For a list of all industries with employment in this occupation, see the Create Customized Tables function.

Industries with the highest levels of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)

Securities, Commodity Contracts, and Other Financial Investments and Related Activities	172,800	18.86	$63.02	$131,090
Credit Intermediation and Related Activities (5221 And 5223 only)	160,890	8.09	$30.55	$63,550
Nondepository Credit Intermediation	24,470	3.89	$40.23	$83,680
Management of Companies and Enterprises	13,430	0.58	$48.46	$100,790
Agencies, Brokerages, and Other Insurance Related Activities	4,490	0.40	$44.96	$93,520

Industries with the highest concentration of employment in this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
Securities, Commodity Contracts, and Other Financial Investments and Related Activities	172,800	18.86	$63.02	$131,090
Other Investment Pools and Funds	730	10.24	(8)	(8)
Credit Intermediation and Related Activities (5221 And 5223 only)	160,890	8.09	$30.55	$63,550
Nondepository Credit Intermediation	24,470	3.89	$40.23	$83,680
Management of Companies and Enterprises	13,430	0.58	$48.46	$100,790

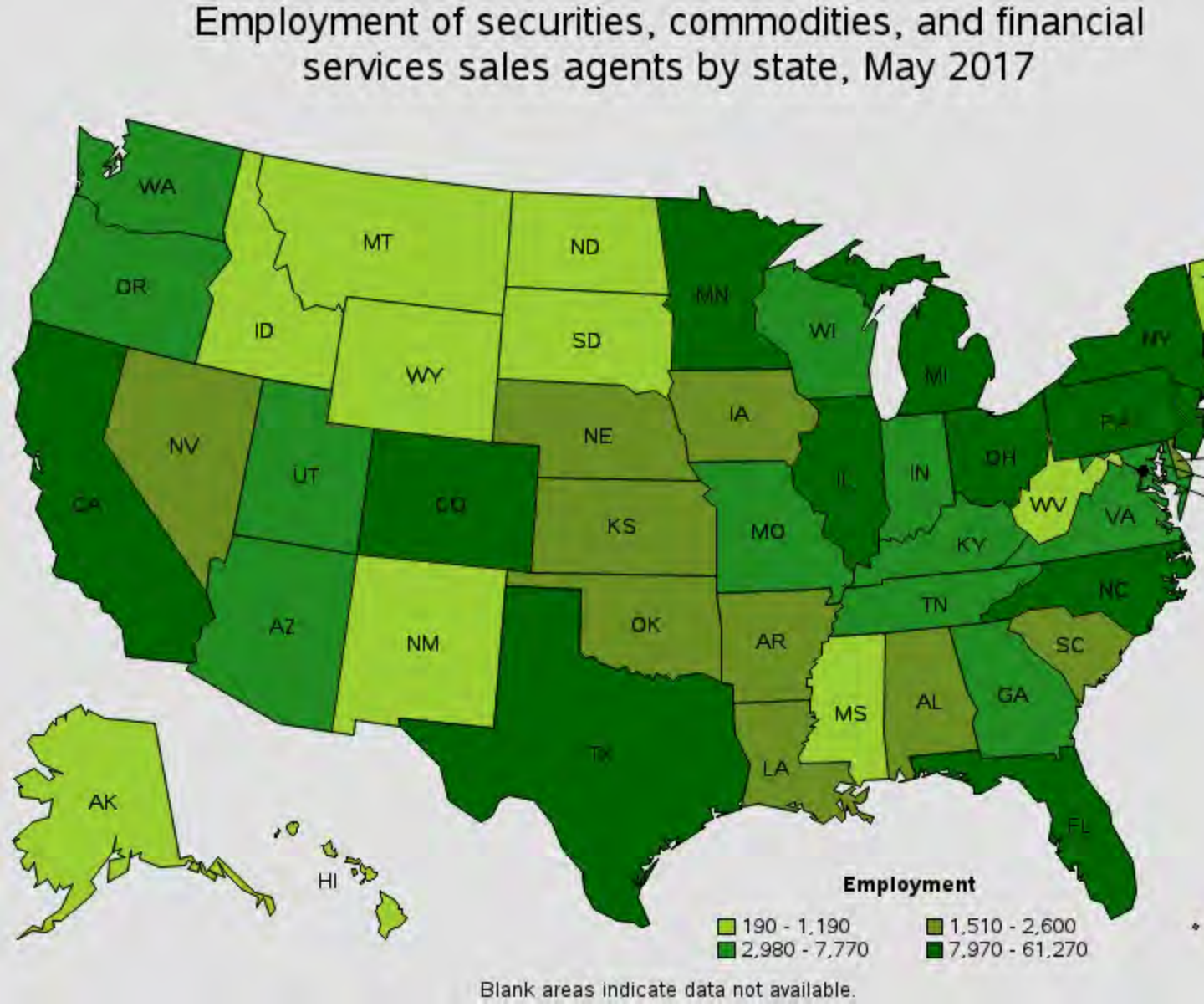
Top paying industries for this occupation:

Industry	Employment (1)	Percent of industry employment	Hourly mean wage	Annual mean wage (2)
State Government, excluding schools and hospitals (OES Designation)	40	(7)	$79.66	$165,690
Real Estate	(8)	(8)	$77.78	$161,780

Securities, Commodity Contracts, and Other Financial Investments and Related Activities	172,800	18.86	$63.02	$131,090
Farm Product Raw Material Merchant Wholesalers	110	0.14	$58.90	$122,510
Computer Systems Design and Related Services	(8)	(8)	$56.29	$117,090

Geographic profile for this occupation: Top

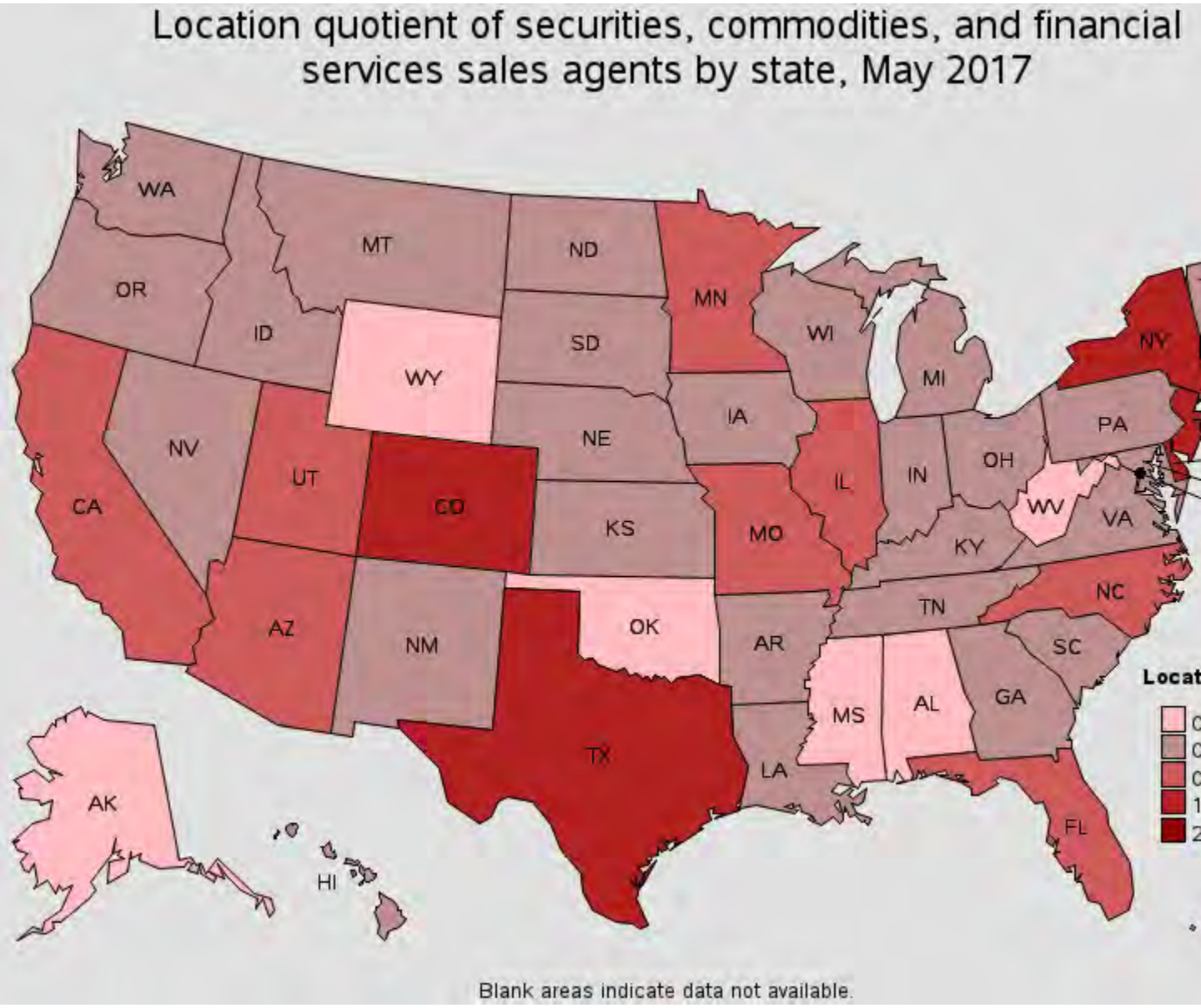
States and areas with the highest published employment, location quotients, and wages for this occupation are provided. For a list of all areas with employment in this occupation, see the Create Customized Tables function.



States with the highest employment level in this occupation:

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York	61,270	6.65	2.43	$78.15	$162,550
California	49,230	2.95	1.08	$36.94	$76,830
Texas	40,790	3.43	1.26	$40.73	$84,720

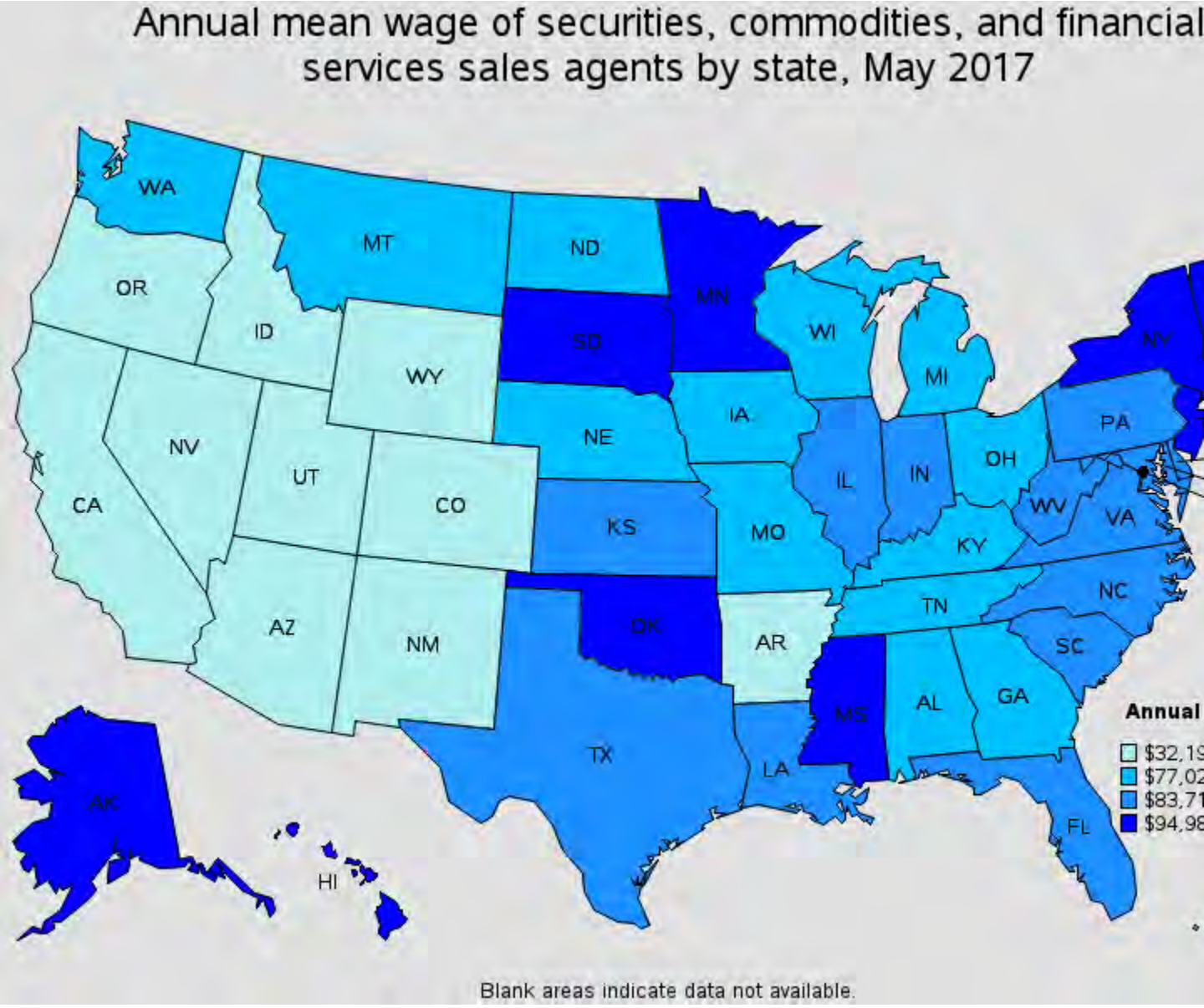
Florida	27,910	3.32	1.21	$40.25	$83,710
Illinois	19,870	3.35	1.23	$41.38	$86,070



States with the highest concentration of jobs and location quotients in this occupation:

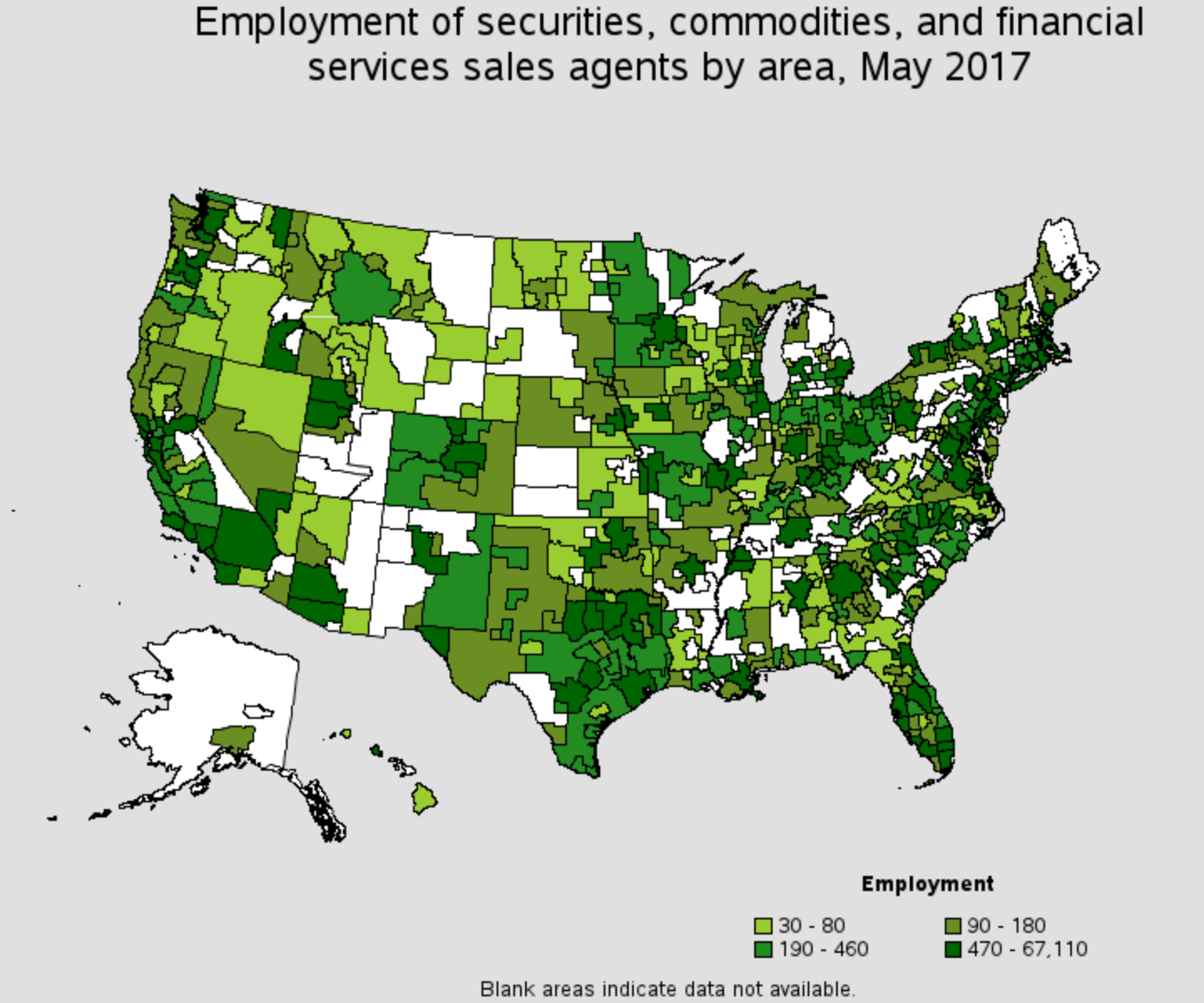
State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)

New York	61,270	6.65	2.43	$78.15	$162,550
Delaware	2,140	4.83	1.77	$40.84	$84,940
Colorado	11,920	4.66	1.71	$36.57	$76,070
Rhode Island	1,890	3.97	1.45	$62.52	$130,040
Connecticut	6,560	3.97	1.45	$60.62	$126,080



Top paying States for this occupation:

State	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York	61,270	6.65	2.43	$78.15	$162,550
Rhode Island	1,890	3.97	1.45	$62.52	$130,040
Connecticut	6,560	3.97	1.45	$60.62	$126,080
Massachusetts	11,500	3.26	1.19	$55.78	$116,030
Vermont	510	1.67	0.61	$54.58	$113,520



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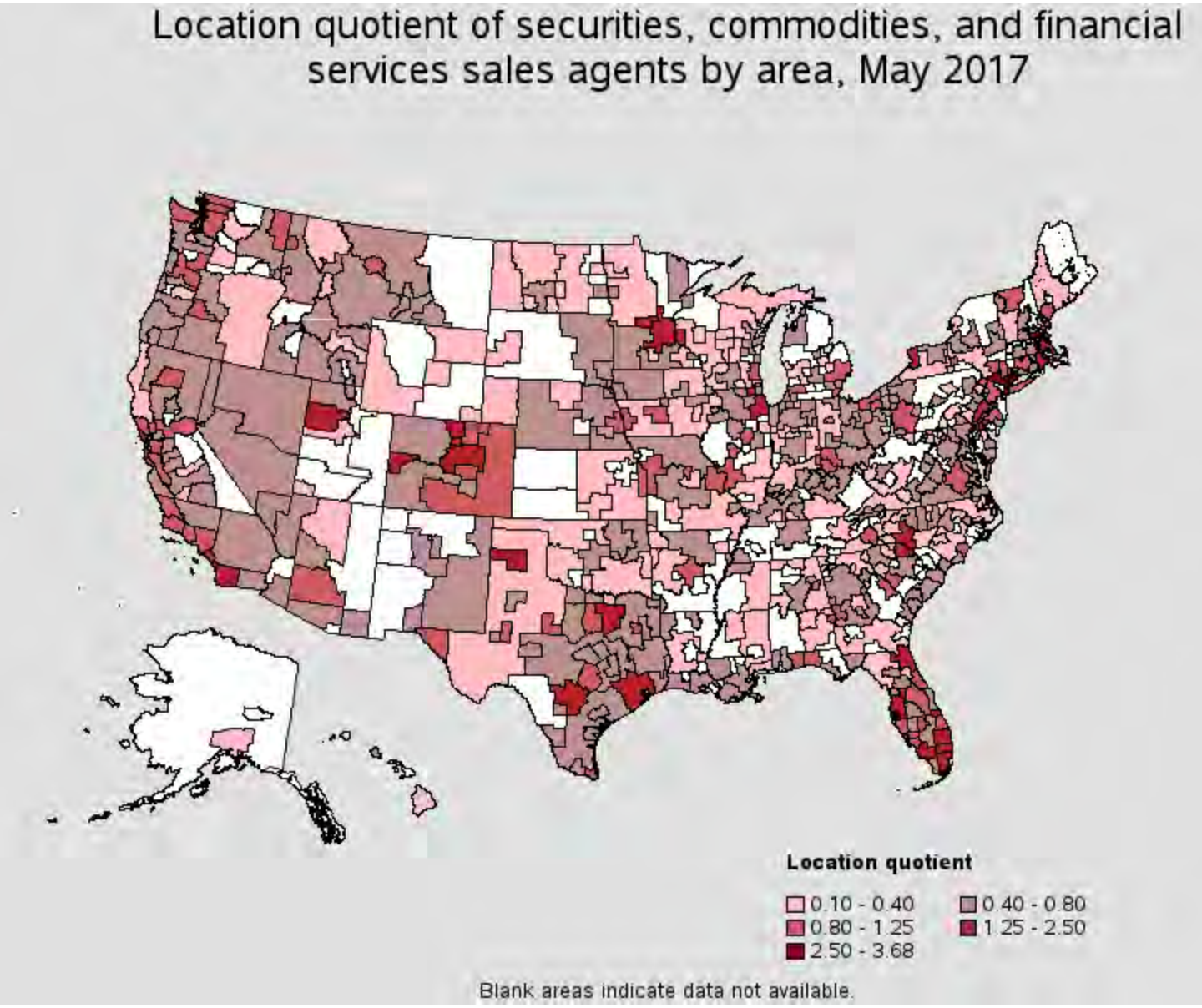
Metropolitan areas with the highest employment level in this occupation:

Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
New York-Jersey City-White Plains, NY-NJ Metropolitan Division	59,110	8.83	3.23	(8)	(8)

Chicago-Naperville-Arlington Heights, IL Metropolitan Division	16,340	4.46	1.63	$42.65	$88,710
Los Angeles-Long Beach-Glendale, CA Metropolitan Division	13,300	3.00	1.10	$40.96	$85,190
Dallas-Plano-Irving, TX Metropolitan Division	11,920	4.78	1.75	$47.11	$98,000
Houston-The Woodlands-Sugar Land, TX	11,810	4.03	1.48	$39.84	$82,880
Boston-Cambridge-Newton, MA NECTA Division	9,300	5.06	1.85	$56.71	$117,950
Denver-Aurora-Lakewood, CO	8,480	5.87	2.15	$37.27	$77,520
Anaheim-Santa Ana-Irvine, CA Metropolitan Division	7,220	4.47	1.63	$37.35	$77,680
Minneapolis-St. Paul-Bloomington, MN-WI	7,210	3.73	1.36	$47.86	$99,550
Phoenix-Mesa-Scottsdale, AZ	6,450	3.26	1.19	$33.07	$68,780



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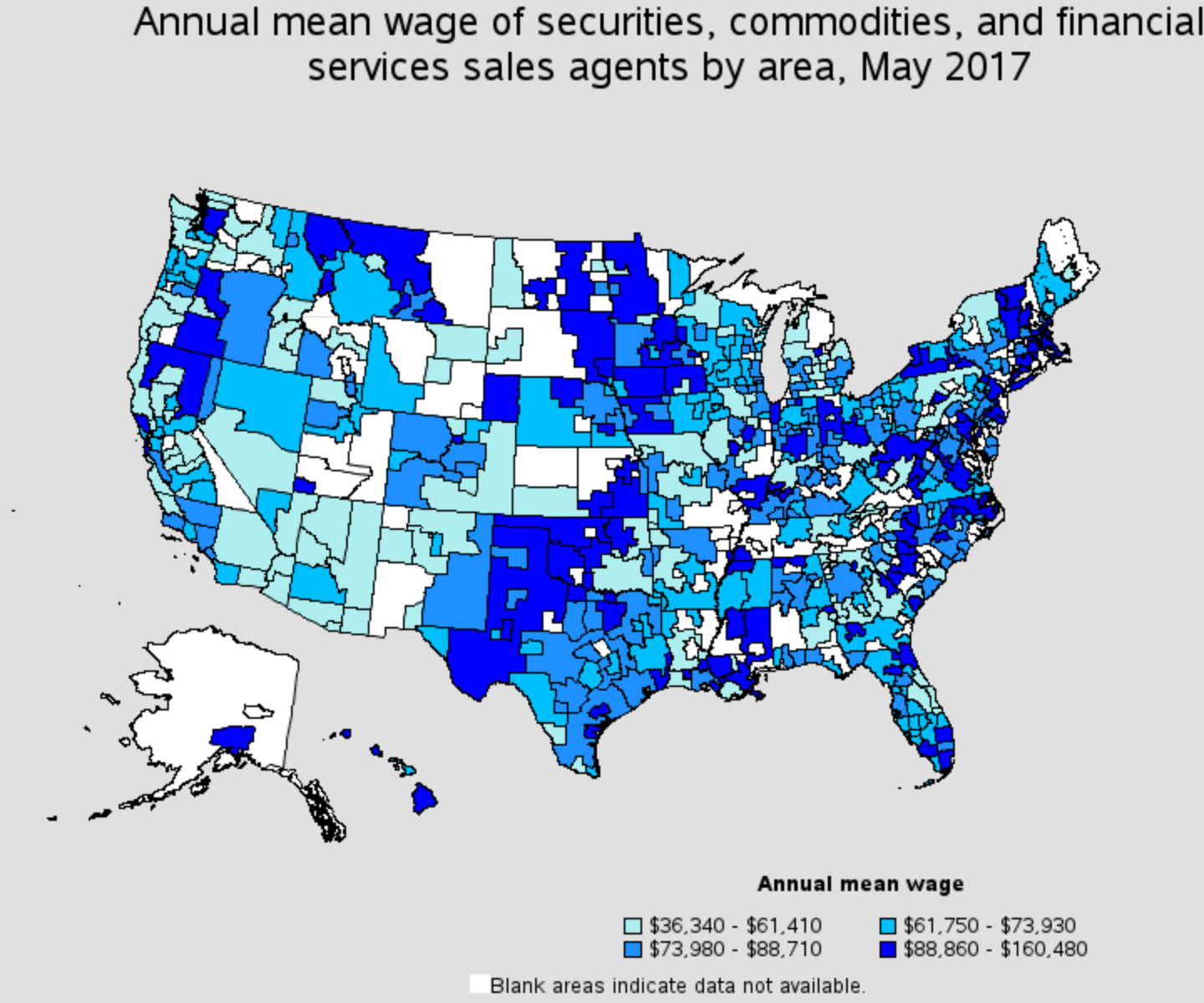
Metropolitan areas with the highest concentration of jobs and location quotients in this occupation:

Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Bridgeport-Stamford-Norwalk, CT	4,180	10.05	3.68	$67.82	$141,070

New York-Jersey City-White Plains, NY-NJ Metropolitan Division	59,110	8.83	3.23	(8)	(8)
Nashua, NH-MA NECTA Division	970	7.32	2.68	$49.21	$102,350
Denver-Aurora-Lakewood, CO	8,480	5.87	2.15	$37.27	$77,520
West Palm Beach-Boca Raton-Delray Beach, FL Metropolitan Division	3,420	5.67	2.08	$47.32	$98,430
Wilmington, DE-MD-NJ Metropolitan Division	1,970	5.66	2.07	$41.02	$85,330
Trenton, NJ	1,180	5.14	1.88	$46.37	$96,450
The Villages, FL	130	5.07	1.85	$34.25	$71,240
Boston-Cambridge-Newton, MA NECTA Division	9,300	5.06	1.85	$56.71	$117,950
St. Cloud, MN	520	4.98	1.82	$24.78	$51,550



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Top paying metropolitan areas for this occupation:

Metropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Florence-Muscle Shoals, AL	30	0.61	0.22	$67.89	$141,210
Bridgeport-Stamford-Norwalk, CT	4,180	10.05	3.68	$67.82	$141,070

Worcester, MA-CT	450	1.60	0.59	$64.37	$133,880
Brockton-Bridgewater-Easton, MA NECTA Division	(8)	(8)	(8)	$60.93	$126,740
Peabody-Salem-Beverly, MA NECTA Division	210	2.20	0.81	$59.14	$123,020
Oklahoma City, OK	740	1.23	0.45	$58.37	$121,400
Sioux Falls, SD	270	1.80	0.66	$57.71	$120,030
Ithaca, NY	110	2.23	0.82	$57.18	$118,930
Jacksonville, FL	2,740	4.10	1.50	$56.98	$118,520
St. George, UT	40	0.57	0.21	$56.89	$118,320

Nonmetropolitan areas with the highest employment in this occupation:

Nonmetropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
North Texas Region of Texas nonmetropolitan area	510	1.89	0.69	$39.95	$83,100
North Northeastern Ohio non-metropolitan area (non-contiguous)	360	1.08	0.40	$35.12	$73,050
Hill Country Region of Texas nonmetropolitan area	320	1.65	0.60	$42.26	$87,890
Piedmont North Carolina nonmetropolitan area	270	1.06	0.39	$39.76	$82,690
Central Kentucky nonmetropolitan area	260	1.46	0.54	(8)	(8)

Nonmetropolitan areas with the highest concentration of jobs and location quotients in this occupation:

Nonmetropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
Eastern and Southern Colorado nonmetropolitan area	180	2.65	0.97	$18.01	$37,460
Northern Vermont nonmetropolitan area	170	2.45	0.90	$49.12	$102,160
Northwest Washington nonmetropolitan area	130	2.43	0.89	$20.14	$41,900
Southwest Colorado nonmetropolitan area	200	2.07	0.76	$39.83	$82,850
South Nevada nonmetropolitan area	100	2.04	0.75	$27.71	$57,650

Top paying nonmetropolitan areas for this occupation:

Nonmetropolitan area	Employment (1)	Employment per thousand jobs	Location quotient (9)	Hourly mean wage	Annual mean wage (2)
West Montana nonmetropolitan area	50	0.69	0.25	$77.15	$160,480
Southeast Mississippi nonmetropolitan area	90	0.61	0.22	$73.11	$152,060
West Central New Hampshire nonmetropolitan area	70	1.15	0.42	$67.14	$139,650
Southeast Minnesota nonmetropolitan area	240	1.49	0.54	$62.59	$130,190
Northwest Iowa nonmetropolitan area	170	1.27	0.47	$60.88	$126,640

About May 2017 National, State, Metropolitan, and Nonmetropolitan Area Occupational Employment and Wage Estimates

These estimates are calculated with data collected from employers in all industry sectors, all metropolitan and nonmetropolitan areas, and all states and the District of Columbia. The top employment and wage figures are provided above. The complete list is available in the downloadable XLS files.

The percentile wage estimate is the value of a wage below which a certain percent of workers fall. The median wage is the 50th percentile wage estimate--50 percent of workers earn less than the median and 50 percent of workers earn more than the median. More about percentile wages.

(1) Estimates for detailed occupations do not sum to the totals because the totals include occupations not shown separately. Estimates do not include self-employed workers.

(2) Annual wages have been calculated by multiplying the hourly mean wage by a "year-round, full-time" hours figure of 2,080 hours; for those occupations where there is not an hourly wage published, the annual wage has been directly calculated from the reported survey data.

(3) The relative standard error (RSE) is a measure of the reliability of a survey statistic. The smaller the relative standard error, the more precise the estimate.

(5) This wage is equal to or greater than $100.00 per hour or $208,000 per year.

(7) The value is less than .005 percent of industry employment.

(8) Estimate not released.

(9) The location quotient is the ratio of the area concentration of occupational employment to the national average concentration. A location quotient greater than one indicates the occupation has a higher share of employment than average, and a location quotient less than one indicates the occupation is less prevalent in the area than average.

Other OES estimates and related information:

May 2017 National Occupational Employment and Wage Estimates

May 2017 State Occupational Employment and Wage Estimates

May 2017 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates

May 2017 National Industry-Specific Occupational Employment and Wage Estimates

May 2017 Occupation Profiles

Technical Notes

Sample Job Descriptions for DBA in Information Systems Specialization

Research Data Scientist, KPMG

Innovate. Collaborate. Shine. Lighthouse — KPMG's Center of Excellence for Advanced Analytics — has both applied data science, AI, and big data architecture capabilities. Here, you'll work with a diverse team of sophisticated data and analytics professionals to explore the solutions for clients in a platform-diverse environment. This means your ability to find answers is limited only by your creativity in leveraging a vast array of techniques and tools. Be a part of a high-energy, diverse, fast-paced, and innovative culture that delivers with the agility of a tech startup and the backing of a leading global consulting firm. For you, that translates into the chance to work on a wide range of projects — covering technologies and solutions from AI to optimization — and the power to have a real impact in the business world. So, bring your creativity and pioneering spirit to KPMG Lighthouse.

KPMG is currently seeking an Associate to join our KPMG Lighthouse - Center of Excellence for Advanced Analytics.

Responsibilities:

- Analyze and model structured data using advanced statistical methods and implement algorithms and software needed to perform analyses
- Build recommendation engines, spam classifiers, sentiment analyzers and classifiers for unstructured and semi-structured data
- Cluster large amount of user generated content and process data in large-scale environments using Amazon EC2, Storm, Hadoop and Spark
- Perform machine learning, natural language, and statistical analysis methods, such as classification, collaborative filtering, association rules, sentiment analysis, topic modeling, time-series analysis, regression, statistical inference, and validation methods
- Participate in client engagements focused on big data and advanced business analytics, in diverse domains such as product development, marketing research, public policy, optimization, and risk management; communicate results and educate others through reports and presentations
- Perform explanatory data analyses, generate and test working hypotheses, prepare and analyze historical data and identify patterns

Qualifications:

- A minimum of one year of professional experience working as a Data Scientist
- Master's degree or PhD from an accredited college/university in Computer Science, Statistics, Mathematics, Engineering, Bioinformatics, Physics, Operations Research, or related fields, with a strong mathematical background and ability to understand algorithms and methods from a mathematical viewpoint and an intuitive viewpoint
- Strong knowledge in at least one of the following fields: natural language processing (NLP), artifical intelligence (AI), machine learning (ML), data visualization, statistical modeling, data mining, or information retrieval
- Strong data extraction and processing, using MapReduce, Pig, and/or Hive preferred
- Ability to travel up to eighty percent of the time. Must be legally authorized to work in the United States without sponsorship of a VISA.

KPMG LLP (the U.S. member firm of KPMG International) offers a comprehensive compensation and benefits package. KPMG is an equal opportunity employer. All qualified applicants are considered for employment without regard to race, color, creed, religion, age, sex/gender, national origin, ancestry, citizenship status, marital status, sexual orientation, gender identity or expression, disability, physical or mental handicap unrelated to ability, pregnancy, veteran status, unfavorable discharge from military service, genetic information, personal appearance, family responsibility, matriculation or political affiliation, or other legally protected status. KPMG maintains a drug-free workplace.

Data Scientist, Booz Allen Hamilton

The Challenge:

Are you excited at the prospect of unlocking the secrets held by a data set? Are you fascinated by the possibilities presented by the IoT, machine learning, and artificial intelligence advances? In an increasingly connected world, massive amounts of structured and unstructured data open up new opportunities. As a data scientist, you can turn these complex data sets into useful information to solve global challenges. Across private and public sectors — from fraud detection, to cancer research, to national intelligence — you know the answers are in the data.

We have an opportunity for you to use your analytical skills to improve the healthcare industry. You'll work closely with your customer to understand their questions and needs, and then dig into their data-rich environment to find the pieces of their information puzzle. You'll develop algorithms, write scripts, build predictive analytics, use automation, apply machine learning, and use the right combination of tools and frameworks to turn that set of disparate data points into objective answers to help senior leadership to make informed decisions. You'll provide your customer with a deep understanding of their data, what it all means, and how they can use it. Join us as we use data science for good in the healthcare industry.

Empower change with us.

Build Your Career:

At Booz Allen, we know the power of analytics and we're dedicated to helping you grow as a data analysis professional. When you join Booz Allen, you can expect:

- access to online and onsite training in data analysis and presentation methodologies, and tools like Hortonworks, Docker, Tableau, and Splunk
- a chance to change the world with the Data Science Bowl—the world's premier data science for social good competition
- participation in partnerships with data science leaders, like our partnership with NVIDIA to deliver Deep Learning Institute (DLI) training to the federal government

You'll have access to a wealth of training resources through our Analytics University, an online learning portal specifically geared towards data science and analytics skills, where you can access more than 5000 functional and technical courses, certifications, and books. Build your technical skills through hands-on training on the latest tools and state-of-the-art tech from our in-house experts. Pursuing certifications? Take advantage of our tuition assistance, on-site bootcamps, certification training, academic programs, vendor relationships, and a network of professionals who can give you helpful tips. We'll help you develop the career you want, as you chart your own course for success.

You Have:

- Experience in working with Python, SQL, and R

- Experience in working with natural language processing (NLP), clustering, and regression modeling
- Knowledge of Scala and JavaScript
- Ability to work with machine learning and data visualization
- HS diploma or GED

We’re an EOE that empowers our people—no matter their race, color, religion, sex, gender identity, sexual orientation, national origin, disability, or veteran status—to fearlessly drive change.

Applied Social Scientist, National Security Agency.

The professionals at the National Security Agency (NSA) have one common goal: to protect our nation. The mission requires a strong offense and a steadfast defense. The offense collects, processes and disseminates intelligence information derived from foreign signals for intelligence and counterintelligence purposes. The defense prevents adversaries from getting access to sensitive or classified national security information. Managers at NSA, where people are a priority, are responsible for leveraging the diversity of their work force to create innovative solutions that support the Agency's missions.

NSA seeks mid-level to experienced human capital professionals with emphases on job analysis, personnel selection and assessment, and/or survey research for full-time positions. Incumbents will work as part of a group of Industrial/Organizational (I/O) Psychologists, strategic consultants, survey researchers, and compensation professionals to drive human capital initiatives and strategies at NSA.

The ideal candidate will possess experience in one of the above areas and have exceptional skills in the areas of consultation, problem solving, report writing, and client/project management. Expert research design and analysis skills, attention to detail, and self-motivation are critical.

Example projects include:

- Designing and executing job analysis studies
- Developing and validating assessments for selection and development purposes (e.g., structured interviews, cognitive and non-cognitive measures, and knowledge tests)
- Developing and executing plans for evaluating the impact of EEOD programs
- Conducting EEO analyses for selection and promotion decisions
- Developing and analyzing workforce surveys (e.g., climate, quality of hire, skills assessments)
- Evaluating the impact of human capital programs
- Analyzing a variety of program-related data to drive strategic business decisions
- Contributing to basic and applied research projects

The ideal candidate would be expected to:

- Hold an MA/MS or PhD in Industrial/Organizational Psychology, Survey Research, Quantitative Psychology, or related field
- Collaborate with team members across the organization
- Develop strategic partnerships throughout the Agency, to help achieve organizational goals and needs
- Contribute to the conceptualization, design, analysis, and presentation of applied research (applying appropriate quantitative and qualitative research techniques, data collection strategies, data analysis methods) to inform technical and leadership decisions
- Keep abreast of best practices and new research in the I/O and human capital management fields
- Synthesize complex findings and detailed research into executive summaries and presentations intended for managerial decisions and/or publication

- Provide high quality customer service to clients through superior technical work as well as effective project management and communication
- Be proficient in relevant tools, such as MS Excel, MS Word, MS Power Point, and/or Statistical software (e.g., SPSS, R)

Qualifications
Below are the generic minimum qualifications for this work role. However, the ideal candidate would be expected to hold an MA/MS or PhD in Industrial/Organizational Psychology, Survey Research, Quantitative Psychology, or related field.

Salary Range: $96,970 - $148,967 (Senior)

- The qualifications listed are the minimum acceptable to be considered for the position. Salary offers are based on candidates' education level and years of experience relevant to the position and also take into account information provided by the hiring manager/organization regarding the work level for the position.

Entry is with a Bachelor's degree plus 6 years of relevant experience, or a Master's degree plus 4 years of relevant experience, or a Doctoral degree plus 2 years of relevant experience.

Degree must be in Applied Social Sciences or Applied Behavioral Sciences (e.g., Organizational Development, I-O Psychology, Business Administration, Human Resources Management, Sociology).

Relevant experience must be in social or behavioral sciences (e.g., organizational development, organizational effectiveness, performance improvement, test development and validation, social network analysis, or systems thinking), some of the experience must be current (i.e., within the past 2 years) and must include performing research and analysis and formal/informal leadership.

Salary Range: $134,789 - $164,200 (Expert)

- The qualifications listed are the minimum acceptable to be considered for the position. Salary offers are based on candidates' education level and years of experience relevant to the position and also take into account information provided by the hiring manager/organization regarding the work level for the position.

Entry is with a Bachelor's degree plus 9 years of relevant experience, or a Master's degree plus 7 years of relevant experience, or a Doctoral degree plus 5 years of relevant experience.

Degree must be in Applied Social Sciences or Applied Behavioral Sciences (e.g., Organizational Development, I-O Psychology, Business Administration, Human Resources Management, Sociology).

Relevant experience must be in social or behavioral sciences (e.g., organizational development, organizational effectiveness, performance improvement, test development and validation, social network analysis, or systems thinking), some of the experience must be current (i.e., within the past 2 years) and must include performing research and analysis and formal leadership or management.

How To Apply - External

To apply for this position, please click the 'Apply Now' button located at the top or bottom of this page. After completing the application and clicking the 'Submit Final' button, you will receive a confirmation email. Emails regarding your application status will be sent periodically. Please ensure your spam filters are configured to accept emails from noreply@nsa.gov.

***PLEASE NOTE:

U.S. Citizenship is required for all applicants. Reasonable accommodations provided to applicants with disabilities during the application and hiring process where appropriate. NSA is an equal opportunity employer and abides by applicable employment laws and regulations. All applicants and employees are subject to random drug testing in accordance with Executive Order 12564. Employment is contingent upon successful completion of a security background investigation and polygraph.

This position is a Defense Civilian Intelligence Personnel System (DCIPS) position in the Excepted Service under 10 U.S.C. 1601. DoD Components with DCIPS positions apply Veterans' Preference to eligible candidates as defined by Section 2108 of Title 5 USC, in accordance with the procedures provided in DoD Instruction 1400.25, Volume 2005, DCIPS Employment and Placement. If you are a veteran claiming veterans' preference, as defined by Section 2108 of Title 5 U.S.C., you may be asked to submit documents verifying your eligibility.

Please note that you will be asked a series of questions and your responses will be used as part of the screening process of your application. Your responses will assist in determining your eligibility for the position. Failure to provide the required information or providing inaccurate information will result in your application not being considered for this position. Only those applicants who meet the qualifications for the position will be contacted to begin employment processing.

DCIPS Disclaimer

The National Security Agency (NSA) is part of the DoD Intelligence Community Defense Civilian Intelligence Personnel System (DCIPS). All positions in the NSA are in the Excepted Services under 10 United States Codes (USC) 1601 appointment authority.
30+ days ago
- apply on company site

Data Scientist, AI and Machine Learning, ADOBE Inc.

Position summary * Adobe is looking for a Data Scientist to help build the web's next generation of products that will allow digital marketers to maximize revenue and expand their brand presence. The selected candidate will work on various development projects ranging from machine learning model development, to modeling algorithm implementation in production systems. Individuals in this role are expected to be comfortable working as a AI&ML scientist with knowledge and experience in AI, machine learning, or statistical learning.

Responsibilities • Collaborate with product management and engineering groups to develop new products and features • Be able to identify customers' needs and desires by specifying the research needed to obtain market information • Deliver informative and effective findings, results and recommendations from machine learning models to stakeholders, be able to create dashboards of important statistics and metrics • Develop and implement scalable and efficient modeling algorithms that can work with large-

scale data in production systems • Develop predictive models to address various business problems through leveraging advanced statistical modeling, machine learning, or data mining techniques.

Required Qualifications • MS or PhD degree in Computer Science or relevant technical fields. • Proficient in one or more programming languages such as Python, Java, C and etc. • Familiar with one or more machine learning or statistics tools/packages such as R, SciKitLearn, SparkML(MLlib), Tensorflow and etc. • Knowledge and experience of machine learning, statistical modeling, or AI techniques • Knowledge and experience of relational databases and SQL • Strong analytical and quantitative problem-solving ability. • Excellent communication, relationship skills and a strong team player. Preferred Qualifications • Experience with big data techniques (such as Hadoop, MapReduce, Hive, Pig, Spark) • Knowledge of cloud platforms (such as AWS or Azure) and experience of developing applications on the cloud platforms using various cloud services

At Adobe, you will be immersed in an exceptional work environment that is recognized throughout the world on Best Companies lists. You will also be surrounded by colleagues who are committed to helping each other grow through our unique Check-In approach where ongoing feedback flows freely. If you're looking to make an impact, Adobe's the place for you.

Discover what our employees are saying about their career experiences on the Adobe Life blog and explore the meaningful benefits we offer. Adobe is an equal opportunity employer. We welcome and encourage diversity in the workplace regardless of race, gender, religion, age, sexual orientation, gender identity, disability or veteran status.

Data Scientist, World Bank

The World Bank Group (WBG) twin goals of ending extreme poverty and promoting shared prosperity reflect a new global landscape: one in which developing countries have an unprecedented opportunity to end extreme poverty within a generation.

The big data program sits in the Global Operations Knowledge Management unit of the World Bank Group. The program works to accelerate capabilities in big data analytics, including machine learning, and applications in network analytics and text analytics to support the World Bank's knowledge strategy to improve operational and development effectiveness.

The data scientist will support an interdisciplinary team that delivers both technical assistance and knowledge activities to support World Bank Global Practices to put big data into action for development. The candidate will help test and incubate big data applications across several sectors, including pilots profiled in recent publication http://bit.ly/biginno . Further, we are seeking specialized skills in network and graph analytics for use in applications to improve and mobilize development knowledge and services within the World Bank, and toward emerging development applications in sectoral areas like trade, mobility patterns, and accessibility to jobs.

The solution areas the data scientist will support include, but are not limited to:

- Operational Applications: Topic modeling, natural language processing, and network analytics on development and organizational information to develop innovative and automated knowledge and data products and services to improve operational effectiveness
- Development Applications: Provide data science technical assistance to applied research projects to test and validate big data pilots that typically use non-traditional data sources and methods, including

social media, mobile phone, satellite, and ground sensor data and analytics for sectoral development applications like machine learning on big data sources to estimate poverty, to monitor crop yields, road conditions, and urbanization assessments

Note: If the selected candidate is a current Bank Group staff member with a Regular or Open-Ended appointment, s/he will retain his/her Regular or Open-Ended appointment. All others will be offered a 3 year term appointment.

Duties and Accountability:

The Data Scientist will work closely with colleagues in operations, knowledge functions, data units and Information Technology Solutions. Projects typically involve interdisciplinary teams, often comprised of sector specialists, development economists, geographers and technologists.

Candidates should be adept at extracting insights from complex analyses through computational techniques, developing analytic products through well documented and reproducible workflows, writing concise reports, developing compelling visualizations, communicating results clearly and working in teams.

The specific roles and responsibility include, but not limited to the, following:

1. Extract and analyze a wide range of development and operational knowledge using machine learning, network and text analytics to create knowledge and information products and services
2. Provide data science technical assistance to big data pilots in collaboration with Global Practices in sectors like Trade, Transport, Finance, Energy, Urbanization, Water, and Governance.
3. Support technical scoping, design solutions requirements, support selection and technical supervision of vendor contracts
4. Support efforts to develop robust methods for analysis, and to enhance big data technologies and tools.
5. Provide leadership to promote the use of big data analytics in the World Bank through talks, blog posts, presentations, knowledge activities, community of practice and global solutions groups
6. Collaborate with other World Bank groups to develop shared technical resources, frameworks and practices for big data and reproducible analytics, workflows and analytic products
7. Support existing partnerships and help form new partnerships with private sector, academia, UN agencies, and governmental agencies to further the use of big data for development.

Selection Criteria

1. Master's degree in a relevant discipline and 5+ years of relevant work experience. PhD will be a plus. Relevant disciplines include Computer Science, Economics, Statistics, Mathematics, Physics and other quantitative disciplines with strong computational elements.
2. Technical expertise and background – Experience in various aspects of data science: a creative problem solver with a strong understanding of statistics and research design. Excellent working knowledge of either R or Python. Excellent working knowledge of SQL and NoSQL systems and related approaches to large scale distributed computing. Strong understanding of network analytics, text analytics and machine learning methods and strategies.
3. Knowledge, Learning and Communication – Actively seeks knowledge needed to complete assignments and shares knowledge with others, communicating and presenting information in a clear and organized manner. Strong network with leading institutions (academic, private, and/or government) and established collaboration on big data topics.

4. Business Judgment and Analytical Decision Making – Analyzes facts and data to support sound, logical decisions regarding own and others' work.
5. Written and Verbal Communication – Delivers information effectively in support of team or workgroup. Good writing and editing skills, with a strong command of English and an ability to convey complex ideas in a clear, direct, and lively format.
6. Data Interpretation and Analysis – Able to demonstrate functional proficiency level sufficient to apply this competency to all tasks, including those with significant challenges with both structure and unstructured data.
7. Teamwork and Inclusion – Proven ability to collaborate with other team members across boundaries and contribute productively to the team's work and output, demonstrating respect for different points of view. Able to use strong interpersonal and teamwork skills to cultivate effective, productive client relationships and partnerships across organizational boundaries, to generate excitement and momentum around the Big Data Initiative.
8. Client Orientation – Able to take personal responsibility and accountability for timely response to client queries, requests or needs, working to remove obstacles that may impede execution or overall success.
9. Drive for Results – Able to take personal ownership and accountability to meet deadlines and achieve agreed-upon results, and has the personal organization to do so.

Sample Job Descriptions for DBA in Marketing Specialization

Business Analytic Manager, Product Marketing Strategy & Analytics
T-Mobile
Bellevue, WA

Full-time
Job Description
About Us We're a Bellevue, Wash. based national provider of wireless voice, messaging, and data, built on America's fastest 4G LTE Network. Now covering 308 million Americans, we are growing faster than ever, while abolishing the restrictions, runarounds, overages, and over-promises by other wireless companies. Join our revolution to change the wireless industry for good. We aren't afraid to break the rules, and we have fun doing it! Are you ready to lead the uncarrier movement to the next level? The Team We are the Commercial Strategy and Decision Analytics team - a high profile team of outside-the-box thinkers who bring unrivaled analytic horsepower and critical thinking to T-Mobile's product and marketing organizations. We define the critical metrics and perform deep analysis to ensure T-Mobile delivers on its customer obsession while crushing its performance goals. Are you an inquisitive individual and ready to unleash your intellectual curiosity?

Responsibilities
We are looking for a driven, self-starter with an analytical mindset who is passionate about delivering business value. You will help us build metrics and conduct deep analysis on the value and quality T-Mobile.com's digital experiences to accelerate conversion of prospective visitors into customers. You will influence business strategies and product direction to enhance our customers' experience. You will deliver actionable recommendations that ladder up to the larger strategy and vision for T-Mobile.com. You will drive the definition of T-Mobile.com key performance indicators; continually improve the level of understanding related to T-Mobile.com web experience and user interaction data. You are responsible for driving improvements in digital customer acquisition based on omni-channel analysis; measure or assist in measuring the value of our investments. You will construct executive level presentations and present complex analytical findings in clear, concise, and decision-impacting manner; execute on high profile analysis and deliver data narratives across business groups. You will develop and lead positive collaborations with one or more cross-functional teams.

Qualifications
- 5+ years' experience solving analytical problems using quantitative approaches.
- Fluent in SQL and comfortable with efficiently querying large databases.
- Experience defining efficiency and channel-level key performance indicators that are linked to enterprise level goals.

- Excellent prioritization skills, self-motivation and the capacity to work under tight deadlines.
- Willingness to learn and develop analytical skills in a fast growing and dynamic business.
- Advanced degree or higher in finance, economics, math, statistics or related quantitative or data intensive fields.
- Requires competency in customer focus, change & innovation, critical thinking, strategy and relationship building & influencing, talent management, results focus and inspirational leadership.
- Desired experience with statistical and statistical packages (R, SAS, Python).
- Experience with Adobe Data Workbench and Adobe Audience Manager.
- PhD degree in finance, economics, math, statistics or related quantitative or data intensive fields.
- Management consulting industry experience a plus.

Minimum Qualifications

At least 18 years of age. Legally authorized to work in the United States. High School Diploma or GED. Pre-employment background screen.

Company Profile

As America's Un-carrier, T-Mobile US, Inc. (NASDAQ: TMUS) is redefining the way consumers and businesses buy wireless services through leading product and service innovation. The company's advanced nationwide 4G and 4G LTE network delivers outstanding wireless experiences for customers who are unwilling to compromise on quality and value. Based in Bellevue, Washington, T-Mobile US provides services through its subsidiaries and operates its flagship brands, T-Mobile and MetroPCS. For more information, please visit http://www.t-mobile.com.

Marketing Science - Marketing Analytics and Strategy (MA&S)
Genentech
South San Francisco, CA

The Individual Contributor in Marketing Analytics and Strategy (MA&S) is a strategic thought partner to key stakeholders and an integral contributor to Genentech's commercial planning efforts.
He/she is responsible for providing strategic sales and marketing insights, leveraging primary market research methodologies to conduct qualitative and quantitative research across customer types.

MA&Sers work together with their peers whose expertise areas span:

- Market Research: applying primary market research methodologies to conduct qualitative and quantitative research across customer types.
- Forecasting: creating time-series and/or patient-based forecasts; conducting uncertainty analyses.
- Competitive Intelligence: monitoring and tracking competitive landscape; conducting threat assessment (including timelines and probability of launch assessments).
- Marketing Science/Data Scientist: designing and delivering advanced quantitative data analyses leveraging large/complex datasets.

The specific role we are recruiting for focuses on Marketing Science. However, all Individual Contributors have the opportunity to blend and extend their expertise on different initiatives to further develop both the breadth and depth of their capabilities.

Please note, the MA&S hiring process considers all applicants to all open roles. So even though there are multiple roles posted, please only apply to one MA&S requisition, and know that we will be assessing your candidacy for all open roles throughout the resume screening and interviewing process.

Major Responsibilities

- Work with Group Managers and Associate Directors to understand business needs and priorities, as well as immediate scope of work Provide technical/analytical expertise to team through secondary data analytics.
- Apply analytical and statistical methods to answer a variety of business questions using multiple data sources and technical tools.
- Monitor and assess the effectiveness of promotional efforts, projects, and practices and identify opportunities to optimize value of investments.
- Collaborate within cross-functional teams to develop solutions, gain alignment and deliver impactful business insights; engage necessary stakeholders to enable better decision-making.
- Openly share perspective and insights to elevate team thinking and drive a balanced, holistic point of view; effectively weigh and communicate trade-off considerations.
- Take an enterprise mindset, linking individual responsibilities with broader organization; focus on outcomes that provide most business value.
- Demonstrate self-accountability Look for opportunities for continuous improvement; engage managers and peer group regularly for coaching, assistance, and advocacy.
- Act as a thought partner and advisor to all relevant teams and stakeholders; look for and establish opportunities for peer mentorship.

Who You Are

In Individual Contributors, we are looking for people who are nimble, able to effectively collaborate and lend expertise to multi-functional teams and adapt quickly to competing priorities within their Franchise. We are also looking for people who are committed to continuing to make Genentech a great place to work, by seeking opportunities to develop their own and others' expertise through ongoing mentorship and coaching.

- "Self-starter"; strong sense of responsibility with demonstrable comfort in an entrepreneurial environment.
- Able to work effectively in a fluid, cross-functional matrixed environment and stand out as a successful collaborator.
- Strong interpersonal skills and a consultative mindset, with the ability to develop strong partnerships
- Good problem-solving ability, breaking down complex problems into distinct parts, managing uncertainty, understanding, anticipating interdependencies.
- Able to proactively "connect the dots" by asking thought-provoking questions.

- Objective when presenting insights and guiding decision-making; demonstrate good presentation skills by pairing sound analytics with storytelling.
- Motivated to continuously improve performance; outcomes-focused and driven to achieve objectives
- Able to lean in and manage through change.

Preferred Qualifications

We are recruiting across several levels. All roles require at least:

- Bachelor's Degree (Business, Economics, Statistics, Mathematics, or Physical Sciences or related field); MBA or Graduate-level Degree

Associate manager, MA&S:

- 2+ years of work experience with Bachelors; 1+ year of work experience with Masters; 0+ years of work experience with PhD/JD, preferably within pharmaceutical or biotech industry (commercial or clinical) and/or management consulting.

Manager, MA&S:

- 4+ years of work experience with Bachelors; 3+ year of work experience with Masters; 2+ years of work experience with PhD/JD, preferably within pharmaceutical or biotech industry (commercial or clinical) and/or management consulting.

Senior Manager, MA&S:

- 7+ years of work experience with Bachelors; 5+ year of work experience with Masters; 4+ years of work experience with PhD/JD, preferably within pharmaceutical or biotech industry (commercial or clinical) and/or management consulting.

Principal Manager, MA&S:

- 10+ years of work experience with Bachelors; 8+ year of work experience with Masters; 7+ years of work experience with PhD/JD, preferably within pharmaceutical or biotech industry (commercial or clinical) and/or management consulting.
- Deep expertise in at least one of the following areas: Market Research, Forecasting, Competitive Intelligence, Data Analytics, and / or Advanced Data Analytics.
- Strong knowledge of / experience working with SAS (Base SAS, Macro language, SAS/STAT, regression, T-tests, chi-square, experimental design, CHAID).
- Strong knowledge of secondary data sources including syndicated sales, promotional & marketing data, longitudinal patient level data; experience with payer data.
- Considerable experience and expertise with statistical modeling, analysis and presentation of results to a non-technical audience.
- Experience acting as a strategic thought partner to teams; Demonstrated ability to problem solve and think outside the box.
- Proven track record of leadership, time-management, project management, and teamwork.
- Expertise in standard analysis and presentation software (Excel, PowerPoint).
- Persuasive written and verbal communication skills.

- Strong attention to detail.
- Experience managing outside vendors.

Vice President, Digital & Marketing Analytics
Capital Group
Los Angeles, CA

Experience Level: Director
Other Location(s): N/A
Relocation offered: Yes
Travel required: a. Up to 25%

Come grow with us

At Capital Group, how we work is defined by shared values that include absolute integrity, respect and collaboration. But it's more than that. It's smart and highly driven people united in purpose to serve our investors and one another.

Bring your energy and unique perspective to Capital and you'll have the opportunity to grow with us professionally, personally, and financially. You'll be part of a team that genuinely cares about helping you succeed. You'll work alongside talented colleagues, many of whom build long careers while progressing through multiple roles, establishing lifelong friendships and making a difference in our communities. In return for your contributions, you'll receive premier compensation and benefits, and a company-funded retirement plan that ranks among the most generous.

Capital Group's Digital, Marketing and Analytics practices continue to evolve with an increased reliance on data to drive business outcomes. We are recruiting for a business and technology savvy, action-oriented leader to join our growing team as Vice President, Digital & Marketing Analytics. Based in Los Angeles and reporting to the Head of Analytics & Insights for North America, the successful candidate will continue to evolve and develop the marketing analytics function to provide exceptional analytical insights, act as evangelist for the use of data across all marketing processes and deliver advanced analytics and statistical modeling to identify new opportunities for business value through data. The successful candidate will own the overall development and evolution of the organization's marketing analytics capabilities. He/she will focus on solving marketing data challenges with big data tools and machine learning techniques that will influence the strategy and direction of digital and marketing.

Responsibilities

- Create actionable insights to enable the distribution organization to confidently design, plan, and deliver superior experiences that improve client engagement, drive sales and deliver cost efficiencies.
- Target and engage the right clients in the right channel through expertly applied client intelligence.

- Support business leaders across product, channel, and strategy teams on framing, designing, and conducting research and custom analytics to address their needs and priorities.
- Leverage data science to perform advisor and investor behavior studies, marketing attribution, marketing funnel analysis and other financial market topics.
- Integrate cross-channel data sets, including display, SEM, social, video, and mobile; determine appropriate KPIs/ROI measurement requirements for cross-channel campaigns; work with client-side data teams to coordinate/integrate data and systems as necessary.
- Create a pattern seeking and analysis capability that detects new or unknown patterns that signal changes that may impact marketing.
- Ownership and delivery of overall digital performance metrics and funnel performance; competitive intelligence and analysis of key digital metrics for financial services industry and key competitors.
- Partner with Head of Digital and Head of Content to support their team's core digital and content analytics needs.
- Support the organization's web transformation and lead the analytics and data science work to support personalization and advanced targeting; oversee media and audience targeting insights, forecasting and optimization.

Qualifications

- A minimum of 10+ years of experience in marketing analytics to include media mix models, multi-channel attribution and marketing strategy.
- Demonstrated experience in optimization that influences brand, marketing, and messaging strategy.
- Meaningful experience in solving marketing data challenges with big data tools and machine learning techniques.
- Adept at translating raw data into a compelling narrative with actionable recommendations that directly address key business needs.
- People management experience in leading and developing a high-performing team of marketing analytics and data science professionals.
- Experience with cloud data platforms; proficient in Adobe Analytics, R, Python and/or SQL
- Advanced degree required, PhD a plus.

Company Overview

Founded in 1931, Capital Group is one of the world's largest and most trusted investment management companies and home to the American Funds. We manage more than US$1.39 trillion in assets, and our 7,500 associates make our clients their first priority every day. When we do our job right, millions of investors around the world fulfill their dreams and financial goals, from home ownership and higher education, to a comfortable retirement. Our long-term investment results and outstanding service set us apart from our competitors, while our workplace sets us apart from other employers.

We are an equal opportunity employer, which means we comply with all federal, state and local laws that prohibit discrimination when making all decisions about employment. As equal opportunity employers, our policies prohibit unlawful discrimination on the basis of race, religion, color, national origin, ancestry, sex

(including gender and gender identity), pregnancy, childbirth and related medical conditions, age, physical or mental disability, medical condition, genetic information, marital status, sexual orientation, citizenship status, AIDS/HIV status, political activities or affiliations, military or veteran status, status as a victim of domestic violence, assault or stalking or any other characteristic protected by federal, state or local law.

Data Scientist
Capital One - US
McLean, VA

McLean 1 (19050), United States of America, McLean, Virginia

At Capital One, we're building a leading information-based technology company. Still founder-led by Chairman and Chief Executive Officer Richard Fairbank, Capital One is on a mission to help our customers succeed by bringing ingenuity, simplicity, and humanity to banking. We measure our efforts by the success our customers enjoy and the advocacy they exhibit. We are succeeding because they are succeeding.

Guided by our shared values, we thrive in an environment where collaboration and openness are valued. We believe that innovation is powered by perspective and that teamwork and respect for each other lead to superior results. We elevate each other and obsess about doing the right thing. Our associates serve with humility and a deep respect for their responsibility in helping our customers achieve their goals and realize their dreams. Together, we are on a quest to change banking for good.

Data Scientist

At Capital One data is at the center of everything we do. When we launched as a startup we disrupted the credit card industry by individually personalizing every credit card offer using statistical modeling and the relational database, cutting edge technology in 1988! Fast-forward a few years, and this little innovation and our passion for data has skyrocketed us to a Fortune 200 company and a leader in the world of data-driven decision-making.

As a Data Scientist at Capital One, you'll be part of a team that's leading the next wave of disruption at a whole new scale, using the latest in distributed computing technologies and operating across billions and billions of customer transactions to unlock the big opportunities that help everyday people save money, time and agony in their financial lives.

On any given day you'll be:

- Using Big Data tools (Hadoop, Spark, H2O, AWS) to conduct the analysis of billions of customer transaction records
- Writing software to clean and investigate large, messy data sets of numerical and textual data
- Integrating with external data sources and APIs to discover interesting trends

- Building machine learning models from development through testing and validation to our 30+ million customers in production
- Designing rich data visualizations to communicate complex ideas to customers or company leaders
- Investigating the impact of new technologies on the future of digital banking and the financial world of tomorrow

The Ideal Candidate will be:

- Curious. You ask why, you explore, you're not afraid to blurt out your disruptive idea. You probably know Python, Scala, or R and you're constantly exploring new open source tools.
- Wrangler. You know how to programmatically extract data from a database and an API, bring it through a transformation or two, and model it into human-readable form (ROC curve, map, d3 visualization, Tableau, etc.).
- Creative. Big, undefined problems and petabytes of data don't frighten you. You're used to working with abstract data, and you love discovering new narratives in unmined territories.

Twenty-five years after Capital One was started it's still led by its founder. Be ready to join a community of the smartest people you've ever met, who see the customer first, and want to use their data skills to make a difference.

<u>Basic Qualifications</u>

- Bachelor's Degree plus 2 years of experience in data analytics, or Master's Degree plus 1 year of experience in data analytics, or PhD.
- At least 1 year of experience in open source programming languages for large scale data analysis.
- At least 1 year of experience with machine learning.
- At least 1 year of experience with relational databases.

<u>Preferred Qualifications</u>

- Master's Degree or PhD
- At least 1 year experience working with AWS
- At least 3 years' experience in Python, Scala, or R
- At least 3 years' experience with machine learning
- At least 3 years' experience with SQL

Capital One will consider sponsoring a new qualified applicant for employment authorization for this position.

Analytics - Director
Merkle
Columbia, MD

Perform advanced analytics tasks, including but not limited to:

- Manages project tasks, timelines and deliverables.
- Manages and mentors junior analysts, contributing to their technical and career development.
- Manages relationships with other Merkle business units.
- Develops analytical solutions to client business problems.
- May pitch in the analyze and pull data or implement analytical solutions.

SME in the following techniques:

- Predictive statistical models.
- Customer profiling.
- Segmentation Analysis.
- Survey Design and Analysis.
- Data Analysis and Mining.
- Break-Even Analysis.
- Presents ideas and findings to clients.
- Participates in the sales process through solution development and responses to RFPs.
- Evaluates internal tools and processes.
- Anticipate project risk and constraints and proactively work on solutions to address the risk/constraints; Lead a team to complete large complex analytical project end to end.
- Demonstrate thought leadership; develop best practices, case studies, training class materials, whitepapers, present at industry conferences.
- Own one or multiple client analytical relationships or digital capability area with minimal support.
- Other duties as assigned.

Outcomes:

- Deliver projects on time.
- Deliver quality work.
- Manage junior team members to deliver projects correctly and on time.
- Proactive and responsive communication that results in team/client alignment.
- Client Satisfaction.
- Team engagement and retention.
- Develops a high performing team.
- Recognize and discuss additional opportunities related to Merkle Digital offerings.
- Successful financial management of a large or multiple mid-sized clients.
- Known as a thought Leader in Vertical or Solution space.

Skills:

- Experience with MS Office (Word, Access, Excel, PowerPoint, Outlook) required.
- Experience managing 10+ employees.
- Experience with SAS, SPSS and SQL,multi-variate statistics, logistic regression, multiple regression required.
- Excellent written and oral presentation skills.

- Ability to explain/present complicated/advanced analytical methodology and results to non-technical audiences.
- Ability to discover hidden insights or complex patterns through advanced multi-variate data mining techniques on un-structured business problems.
- Ability to execute advanced analytic tasks (including but not limited to modeling, segmentation, DOE, forecasting, etc.) and create meaningful analytical outputs.
- Ability to identify areas for statistical innovation or process improvement, do independent research, develop innovative approaches or processes/codes to 1) improve client business results, 2) improve efficiencies, 3) reduce potential errors.
- Ability to translate analysis insights into actionable recommendations and strategies for marketers.
- Ability to create robust analytics solutions to optimize marketing investments.

Qualifications:

- Must have experience with modeling and statistical concepts.
- Experiences with applying statistical techniques such as regression, ANOVA, cluster analysis, factor analysis, time series forecasting, experimental and design, etc. to solve business problems.
- Possess core database marketing knowledge such as understanding of Merkle and client data, relational database concepts, and direct marketing concepts.
- Possess core analytical competencies such as ability to formulate an analytical problem; QC data and results; Summarize key findings/insights; Make actionable recommendations; and develop new and innovative analytical solutions to solve challenging business problems.
- Understanding of digital data including the systems and processes used to generate and manipulate it by media type web, ad, email, mobile, etc.
- Development of specific expertise areas within digital and sharing of that expertise through MU classes, white papers, articles, conference presentations, etc.
- Recognized as a thought leader in a specific digital area.
- Possess client/team engagement competencies such as gather specifications, develop analytical roadmap and approach and manage expectations, and coordinate delivery with internal team.

Other:

- Bachelor's Degree (B.S.) or equivalent in statistics, math, economics or related scientific/quantitative field plus several years' experience in applied disciplines; advanced degree (M.A., M.S., Ph.D.) preferred.
- Minimum of 10+ years of experience in quantitative marketing arena, in database and/or digital (addressable) marketing.
- Contribute to innovation, process improvement, standardization.
- Deliver high-quality analytical solutions on time.
- Develop project plan, program plan, or overall roadmap; manage individual/team day-to-day tasks; and meet project deadlines.
- Work effectively across teams to ensure client satisfaction.
- Engage, manage and lead a team (including geographically dispersed).
- Recruit, hire, develop and retain "A" players.

- Deliver constructive feedback to employees and hold difficult conversations with direct reports.
- Support resource deployment/re-deployment to be able to staff and adapt to resourcing challenges.
- Sponsor, support, and/or lead MS initiatives.
- Own one or multiple client analytical relationships or digital capability area(s) with minimal support.
- Support sales by providing analytical solution scope/methodology/level of effort/pricing and giving sales presentations.

Associate PhD
Cornerstone Research
Washington, DC

Who We Are

Cornerstone Research is a leading economic and financial consulting firm with more than 500 staff members across eight offices. Together with an extensive network of internationally prominent faculty, we conduct rigorous, objective research applying the highest standards from academia to address complex financial, economic, accounting, and marketing issues that arise in litigation and regulatory investigation.

Cornerstone Research is involved in a broad variety of high-profile legal cases and disputes. Current matters focus on such topics as capital markets, business and securities valuation, M&A and corporate events, risk management, market competition, the impact of marketing on consumers, and patent infringement. For example, we address issues affecting the ongoing development of financial markets, such as applying the intersection of finance and industrial organization economics to evaluate price setting in derivative markets. Beyond the financial markets, we address financial economics issues arising in a range of sectors, from such innovation-driven industries as life sciences and high technology to energy, telecommunications, and industrial markets. We address economic issues when evaluating potential mergers, claims of anticompetitive conduct, and the impact of intellectual property infringement. We also address marketing and economic issues arising in cases with allegations of misleading marketing or false claims. More detail can be found on our website at www.cornerstone.com.

Associates at Cornerstone Research

Cornerstone Research provides an interesting and rewarding work environment. Those joining our firm enjoy long-term career opportunities supported substantially by our investments in their professional development and an escalating compensation structure. Associates work at the core of our client project teams and in the development of our practice, assuming increasing levels of responsibility. The firm has grown steadily over more than twenty-five years and we maintain a firm culture that is collegial, supportive, friendly, and collaborative.

We benefit from close collaboration with renowned leading academics in finance and economics. Associates help devise and apply innovative analytical approaches meeting the highest academic standards to address challenging issues arising in our work. We invest heavily in leading edge information resources and computing capabilities, and often have access to proprietary data to inform our analysis. Associates help guide teams supported by our outstanding research analysts.

Career development includes staying attuned to – and contributing to the development of – the latest academic research. Associates continue to hone their own research skills while building communications and managerial abilities. The firm supports the development of those interested in becoming testifying experts in some or all of their work, and of those not choosing that path. Either approach provides opportunities for career advancement.

Candidate Profile

Cornerstone Research provides exceptional career opportunities for those who have pursued doctoral studies in finance, economics, accounting, or marketing. Casework at Cornerstone Research challenges Ph.D. candidates to apply the entire breadth of theoretical and empirical skills gained through their doctoral training. Candidates must have the ability to apply academic research to real-world issues and present concise explanations of complex analyses. The ideal candidate has demonstrated strong analytical, communication, and teamwork skills. We offer an industry-competitive compensation and benefits package.

Interested candidates should please refer to the How-to-Apply section of our website for information on required application materials. We are currently hiring in our Boston, Chicago, Los Angeles, Menlo Park (CA), New York, San Francisco, and Washington, DC offices. We will be interviewing at the ASSA/AEA annual meetings in January 2015.

Cornerstone Research provides Equal Employment Opportunities to all employees and applicants for employment without regard to legally protected categories, such as age, sex, gender, gender identity, race, color, creed/religious belief, medical condition, predisposing genetic characteristics or genetic information or testing, disability, marital status, pregnancy status, military status, veteran status, arrest or conviction record (except where permitted by law), sexual orientation, ethnic background, citizen status, ancestry, national origin, or any other consideration protected by federal, state or local law.

Data Scientist / Predictive Modeler
C2G Partners
Ellicott City, MD

Dynamic, Entrepreneurial Consulting Company seeking Data Scientists! If you've got entrepreneurial spirit and passion, are driven by results, and want to be a part of significant growth, we're looking for you!

C2G Partners (C2G) is recognized as an award-winning consulting firm and has provided services to some of the world's best known and most respected organizations. While C2G has worked primarily with clients that are Fortune 500 and mid-sized companies, we also extend services to smaller businesses and non-profits.

C2G is a marketing and analytic consulting company that places consultants in highly strategic marketing and analytic roles, and one of the fastest growing Inc 5000 companies.

If you are ready to embrace the challenge and would like to join our team as one of our Data Scientists, please keep reading!

As Data Scientists, we work with business leaders to solve clients' business challenges and improve clients' business results using advanced analytics techniques. We contribute our Advanced Data Science subject matter expertise to the recommendations and solutions delivered to our clients.

We spend most of our time on getting data into proper shape, performing statistical analyses, developing predictive models and machine learning algorithms to solve clients' business problems. We evaluate different sources of data, discover patterns hidden within raw data, create insightful variables, and develop competing models with different machine learning algorithms. We validate and cross validate our recommendations to make sure our recommendations will perform well over time.

Main Responsibilities

- Work with practice leaders and clients to understand clients' business problem, industry context, data sources, potential risk and constraints.
- Problem solve with practice leaders to translate the business program into a solvable Data Science problem, formulate different approaches, outline pros and cons for each approach.
- Work with practice leaders to get client feedback, get alignment on approaches, deliverables, and overall timeline.
- Develop a project plan including key milestones, timeline, and contingency plan.
- Gather data from client and external data vendors.
- Perform data cleaning/hygiene, data QC, and integrate data from both client internal and external data sources on Advanced Data Science Platform.
- Conduct statistical data analysis, including exploratory data analysis, data mining, and document key insights and findings.
- Create insightful and/or predictive summary variables from granular-level data.
- Develop, validate, and cross-validate predictive models and/or machine learning algorithms using Advanced Data Science techniques and tools.
- Document predictive models / machine learning results that can be incorporated into client-deliverable documentation.
- Document key insights, recommend actions client could take, and quantify business impact.
- Assist client to turn models and algorithms into implementable production codes.

Qualifications:

- MS or PhD degree in Statistics, Math, Operation Research, Economics, Advanced Analytics, Computer Sciences, Engineering.
- 1-10 years' professional experience in Advanced Data Science, such as predictive modeling, statistical analysis, machine learning, text mining, geo-spatial analytics, time series forecasting, optimization.
- Experience with one or more Advanced Data Science software languages (R, Python, Matlab, SAS, Perl, Java, PHP).
- Experience with structured or un-structured data analysis and tools (SQL, Hadoop, Spark, NoSQL, MySQL, MariaDB, Hive, Pig, etc.).
- Comfortable with cloud-based platforms (AWS, Azure, Google).
- Experience with Google Analytics, Adobe Analytics, Optimizely a plus.
- Experience in digital marketing a plus.
- Experience with PBM or Healthcare Payer data a plus.

*This role will require 30-40% travel

Sample Job Descriptions for DBA in Finance Specialization

Cornerstone Research
Associate

Work at Cornerstone Research provides Associates with opportunities to use theoretical and empirical research skills gained through their graduate-level training to devise and apply innovative and rigorous analytical approaches to interesting real-world problems. The outcomes of our cases can have a direct and immediate impact on public policy and corporate strategy.

Associates at Cornerstone Research play a central role in developing project strategy, conducting research, directing analysis, understanding and interpreting data and key findings, and proposing effective approaches to the problems faced by their teams. Associates work closely with senior staff, clients, and experts to define objectives, guide research efforts, manage deadlines and mentor junior staff.

Cornerstone Research provides an interesting and rewarding work environment. Those joining our firm enjoy long-term career opportunities supported by our investments in their professional development and an escalating compensation structure, including an industry-competitive salary and benefits package. Career development includes staying attuned to - and contributing to the development of - the latest academic research. Associates continue to hone their own research skills while building communications and managerial abilities. The firm supports the development of those interested in becoming testifying experts in some or all of their work, and of those not choosing that path. Either approach provides opportunities for career advancement.

CANDIDATE PROFILE: We seek candidates who have pursued doctoral studies in finance, economics, econometrics, accounting, or marketing, and who have graduated or will be graduating in the coming year. Candidates must have the ability to apply academic research to real-world issues. We are currently hiring in our Boston, Chicago, London, Los Angeles, Silicon Valley (Menlo Park, CA), New York, San Francisco, and Washington, DC offices. Cornerstone Research will provide immigration assistance to eligible foreign nationals in accordance with the firm's immigration policy and applicable law.

Cornerstone Research
Senior Economist

Cornerstone Research provides an interesting and rewarding work environment. Those joining our firm enjoy long-term career opportunities supported by our investments in their professional development and an escalating compensation structure including an industry-competitive salary and benefits package. Senior Economists work at the core of our client project teams and in the development of our practice, assuming increasing levels of responsibility. The firm has grown steadily over more than twenty-five years and we maintain a firm culture that is collegial, supportive, friendly, and collaborative.

We benefit from close collaboration with leading academics in finance and economics. Senior Economists help devise and apply innovative analytical approaches meeting the highest academic standards to address

challenging issues arising in our work. We invest heavily in cutting edge information resources and computing capabilities, and often have access to proprietary data to inform our analysis. Senior Economists help guide teams supported by our outstanding research analysts.

Career development includes staying attuned to - and contributing to the development of - the latest academic research. Senior Economists continue to hone their own research skills while building communications and managerial abilities. The firm supports the development of those interested in becoming testifying experts in some or all of their work, and of those not choosing that path. Either approach provides opportunities for career advancement.

CANDIDATE PROFILE: Cornerstone Research provides exceptional career opportunities for those who have pursued doctoral studies in finance, economics, accounting, or marketing. Casework at Cornerstone Research challenges Ph.D. candidates to apply the entire breadth of theoretical and empirical skills gained through their doctoral training. Candidates must have the ability to apply academic research to real-world issues, present concise explanations of complex analyses, and independently manage projects and junior staff. The ideal candidate has at least three years of academic and/or nonacademic work experience; and has demonstrated strong analytical, communication, and teamwork skills. We offer an industry-competitive compensation and benefits package.

DFA Senior Researcher

Job Description:
The Research group at Dimensional is integral both in the successful day-to-day functioning of the firm and in helping develop Dimensional's long-term strategy. The team produces high-quality, thought-leadership research on investments and financial markets that is of interest to and helps educate clients. Research is also involved in the design and development of the firm's investment approach and the application of that approach through portfolio management and trading.
We are seeking an experienced Sr. Researcher for our Charlotte office to help deliver these key services. Sr. Researchers are expected to produce high-quality, academically grounded research to support and enhance our investment strategies and for client education. Research findings are shared through white papers and presentations in Dimensional seminars and conferences.
Responsibilities:

- Conduct rigorous empirical research related to portfolio structure and implementation, run historical simulations, perform regression, attribution and characteristics analysis, conduct econometric tests to evaluate the impact of different portfolio construction and implementation approaches on expected performance, costs and diversification of our investment strategies.
- Represent Dimensional at client conferences, meetings and events; speak to the firm's investment philosophy, outlook and performance, and promote the Dimensional investment management story to internal and external audiences.
- Facilitate customer meetings/conferences to elicit relevant feedback and uncover customer motivations, values, and mental models.
- Oversee collaboration efforts with portfolio management, trading, and client service teams on the design of new strategies, enhancements to existing strategies, and aspects of portfolio management and trading.
- Direct and coordinate research efforts across teams; recognize where re-direction is needed and articulate actionable project recommendations.

- Keep abreast of trends in technology, quantitative finance, capital markets and regulation; recommend and implement new techniques to promote operational effectiveness and minimize inefficiencies.
- Support special projects and initiatives for Research and other departments on an ad hoc basis.

Qualifications:

- A Ph.D. in a discipline such as finance, economics, mathematics, statistics, or a related field.
- 4+ years' experience in a quantitative research role in a financial services or academic environment.
- Extensive experience doing empirical research with large datasets.
- Advanced proficiency in database and statistical software (SAS, Stata, R, or Metlab) and programming languages (SQL, C, C++, Fortran, Java, etc.)
- Excellent ability to communicate financial and economic concepts, in both verbal and written form; able to deliver presentations in an articulate and convincing manner.
- Ability to independently complete research projects, from idea generation to paper publication or strategy implementation.
- Demonstrated success in developing and implementing creative strategies and initiatives
- Ability to resolve problems effectively and exercise independent judgement
- Motivated to self-teach skills and apply learned knowledge to applicable tasks
- Ability to operate and prioritize in a fast-moving & demanding environment and deal with complex situations.

GSS Equities Researcher - Vice President at AQR **Greenwich, CT**

About AQR Capital Management

AQR is a global investment firm built at the intersection of financial theory and practical application. We strive to deliver concrete, long-term results by looking past market noise to identify and isolate the factors that matter most, and by developing ideas that stand up to rigorous testing. By putting theory into practice, we have become a leader in alternative strategies and an innovator in traditional portfolio management since 1998.

At AQR, our employees share a common spirit of academic excellence, intellectual honesty and an unwavering commitment to seeking the truth. We're determined to know what makes financial markets tick – and we'll ask every question and challenge every assumption. We recognize and respect the power of collaboration, and believe transparency and openness to new ideas leads to innovation.

About The Team

The Global Stock Selection (GSS) group is responsible for the portfolio management and research of AQR's strategies relating to individual equities and equity related securities across all global liquid markets. GSS models are applied to market-neutral long/short portfolios in AQR hedge funds as well as to long-only, relaxed-constraint and low volatility portfolios for institutional equity mandates and mutual funds.

Your Role

AQR Capital Management is seeking a talented Vice President level Researcher to join our team focusing on our proprietary strategies related to global stock selection and asset allocation. Candidates should be

motivated and enthusiastic about implementing new ideas and are expected to be hands-on and self-sufficient in conducting all aspects of research projects. The role will involve collaboration with other researchers, portfolio managers, risk managers and traders to develop new and improve current investment strategies.

Your responsibilities may include, but are not limited to:

- Perform statistical and economic research using financial data to develop new, and improve current investment strategies in collaboration with existing research teams
- Conduct research on various aspects of the implementation of investment strategies such as trading cost models, risk models, optimization, and portfolio construction
- Add features to proprietary research system to implement new research ideas

What You'll Bring

- Advanced Degree in Math, Statistics, Economics, Econometrics, Operations Research or Finance
- 5+ years' of related experience covering systematic equities research within in a similar financial environment
- Experience working in a similar quantitative or technical environment
- Experience using programming skills to manipulate large financial data sets for empirical research. Strong skills in one or more high-level languages required, with Python or Java preferred.
- Strong quantitative skills with demonstrated understanding of mathematics, probability, statistics and linear algebra
- Strong understanding of economic and financial concepts and demonstrated intuition around applying these concepts in a quantitative environment
- Demonstrated ability to express and articulate ideas and thought processes in both verbal and written form
- Ability to work independently as well as part of a team

Response to the Questions from the Graduate PCC

1. **Please describe student engagement with faculty given the low number of FTE faculty members.**

   While we allocate only one (two) FTE in the budget for the first (second) year (and we increase the allocation to four FTE as the size of the cohort grows to a steady state in the third year), a group of FTE faculty will be involved and engaged with the students in the DBA program. We should emphasize that the DBA program is a relatively small program – we expect to start with a cohort of about 5 students in *each* specialization in the first year (i.e., a total of around 15 students across the three areas of specialization in the program). Over time, the cohort size for each area may grow to a maximum of 10, but we envision an average size of 4-6 students at least during the early stage of the program.

   Given the relatively small size of the DBA program (about 15 students the first few years and 18 as it grows), this would not be a heavy drain of our faculty resources. We should note that due to budget constraints our PhD program has shrunk significantly over the past few years – the Smith School had close to 100 doctoral students, and the number has dropped to about 80 in the past two years. For example, our marketing area used to have about 12-15 doctoral students and they currently have only 7. The size of the faculty, however, has not changed. With this decrease in the size of our PhD programs, there is room for faculty involvement with the DBA program. Much of the faculty involvement would be in the form of student advising (or independent study), which does not require additional funding for faculty. We provide additional details below.

   Specifically, while the nature and the intensity of faculty advising is different across the PhD and DBA programs, there are many similarities. Our tenure-track and tenured faculty that work specifically with our PhD students view the advising component (e.g., mentoring and overseeing student research projects/summer papers, serving on and chairing doctoral dissertations) as part of their teaching and research commitment. Advising our doctoral students on research projects and dissertations is not viewed as a separate "load" – we do not get teaching credit (or other forms of compensation) for mentoring and advising our doctoral students because it is part of our research mission.

   Similarly, we view the advising of the capstone projects in the DBA program (analogous to the advising of dissertations in the PhD program) also as part of the Smith School's research mission, and hence, much of the faculty engagement with the DBA students would not require additional funding. As discussed in the presentation to the PCC meeting, we believe the DBA program will enhance the Smith School's industry engagement and help bridge the academic-practice divide. The industry engagement can be tremendously valuable to our research faculty and to the Smith School's research mission as it provides opportunities to build long-term relationships with industry leaders (and potentially gain

access to proprietary data for future research). Moreover, the DBA capstone project focuses on applied research (e.g., a case study), which by nature is less intensive than a dissertation. In short, we anticipate that the level of advising and resources required to oversee capstone projects would be lighter than those required for dissertations, which can be sufficiently covered by the extra faculty resources resulting from the significant drop in the size of our PhD program.

Follow-up questions about faculty engagement with PhD students outside of their normal teaching load:

Do students sign up for research credits? Do your faculty not count those credits in their workload?

In the PhD Program, students do sign up for 898 and 899 credits, which are assigned to faculty. While students do receive credits, these credits are not counted towards faculty's normal workload within the business school (i.e., they do not count towards our teaching load). The 899 credits do count for the state requirement. This is the same for the BDBA829 Capstone Project credits. Also, if faculty do take on DBA students for independent studies, it will be counted towards advising credits and not part of their workload. This is similar to when faculty take on MBA students for independent studies – faculty do not get any teaching credit, but these credits are counted towards the state teaching requirement.

Regarding the courses that will be cross-listed across the DBA and PhD programs, we have a separate set of DBA prefix, which will allow us to set up separate sections to keep track of the fraction of DBA students. Our budget incorporates a line item (item 8 on the expense tab) for the cost sharing. Our calculation is based on the following estimates:

> Of the 42 credits (the upper bound across the first two years), about 1/3 (2/3) would be cross-listed with the PhD (Masters) program. This translates into 7 (14) credits for the first year (over the two years when the students have coursework). Assuming a cost of $10,000/credit (closer to an upper bound), the cost of the shared courses in the first year would be $70,000 (and from Year 2 onward $140,000). We expect roughly 50% of the students in the cross-listed courses would be DBA students, and hence, the cost share for Year 1 will be $35,000 (and from Year 2 onward $70,000).

2. **Please explain how faculty will be funded for advising a student's capstone experience.**

As discussed above, much of the faculty advising in the DBA program is similar in nature to that in the PhD program, and hence, it does not require additional funding. The DBA coordinator for each of the three areas of specialization will take on the role as the main advisor. In this role, he/she will not only oversee the students' capstone projects, but will also serve to match each student with the right group of faculty who will serve as additional

advisors on the capstone project. The faculty coordinator from each area will receive 3 credits, which, in total, would be equivalent to less than one FTE (i.e., 4 x 3 credits => 1 FTE).

Follow-up questions about faculty workload and credits:

Are you anticipating that the DBA will be run as an entrepreneurial program? If so, then faculty teaching the DBA students will not be doing so as part of their normal workload requirement. How will this be parsed, in particular in those courses that are shared between the two programs?

The DBA program is expected to be a self-funded program, with sufficient revenue to cover all the expenses. We expect about 2/3 of the credits will overlap with existing courses from the Master's or the PhD programs. For the courses that are cross-listed with existing PhD courses, we expect the marginal costs would be minimal. This is because the class size of our existing PhD courses is relatively small, but the teaching load for PhD courses are counted the same as other courses with more students. Hence, there is excess capacity for the faculty who teach in these courses to service the DBA students. For the courses that are cross-listed with existing Master's courses, the cost share would be determined based on the percentage of DBA students. Given that most courses in the Master's program have 40-60 master's students, and that the expected number of DBA students in each area of specialization is 5-7, the expected cost share will be roughly 10%.

3. **How many new courses need to be created for each specialization in the DBA?**

   We expect about 1/3 of the total credits would be newly created for each specialization in the DBA program (i.e., roughly 18 out of 54 credits). The 18 credits will include two special topic courses in each specialization (2x3 credits) and the Capstone Project course (BDBA829:12 credits). BDBA829 will be the Capstone Project course. The special topic courses include: BDBA857 (A-Z), BDBA858 (A-Z), BDBA747 (A-Z), BDBA748 (A-Z), and BDAB708 (A-Z). These courses may change over time to reflect the current trends in real world business applications. For your reference, please see the attached excel spreadsheet (1 DBA Courses Number Update.xls) for a more detailed listing of the courses, with the special topic courses highlighted in yellow in the three specialization tabs.

4. **Please provide a location-specific market demand analysis for the DBA as it relates to demand in the MD/DC/VA area.**

   We conducted an industry analysis for the DBA program during early stages of the proposal (see 8_industry analysis). This analysis provides detailed statistics on employment projections by occupations as well as geographic areas from the Bureau of Labor Statistics (BLS). As indicated in the report, Maryland, DC, and Virginia consistently come up as the

top geographic areas for the occupations (e.g., information research scientists, information system managers, social scientists) that a DBA is most relevant.

In addition, the Bureau of Labor Statistics indicates that 1) DC and Virginia are two of the top states in the US employing management level positions with annual wages in the six figures, and 2) the "Washington-Arlington-Alexandria, DC-VA-MD-WV" is one of the top metro areas for employing management level positions again with a six-figure annual wage.[1]

The local area demand is further highlighted by a 2016 report "Trends in Workforce Demand" conducted by the Metropolitan Washington Council of Governments.[2] This report charts the job growth in the Metropolitan Washington DC area as well as compares to the national averages of job growth. Most specifically, the DC/MD/VA region has seen a 14% job growth rate in Education and Health Services and 6% growth rate in both Professional and Business Services and Trade, Transportation and Utilities. By specifically drilling down the Professional and Business Services industry cluster, we see growth specifically in the Management, Scientific and Technical Consulting Services. It further shows that the top industries in the DC/MD/VA area are Accenture, Booz Allen Hamilton, and Deloitte. These companies are specifically known to prefer individuals with PhD's or DBA's for their executive and top research positions.

The DBA will focus on three areas of specialization that reflect these same job growth trends in the DC/MD/VA. The Finance specialization will provide the skill set required by not only the top industries identified above but also by the highly regarded employers at the IMF, Cornerstone Research, World Bank, and the Federal Reserve Board. The Information Systems area of specialization would provide individuals with business analytics expertise and expand on project management training. These skills are specifically regarded by companies such as Booz Allen Hamilton. The Marketing area of specialization will also expand on marketing analytics and consumer behavior within an industry and management perspective. With the development of Amazon's H2Q coming to the Washington DC area metro, we anticipate that these skills in all three areas of specializations will be highly coveted. Employers may even work with their current employees in sponsorship of the DBA education.

Additionally, we have tracked the performance of a similar program offered by Virginia Tech's Pamplin College of Business at the Falls Church campus, which has grown to 35 students over three years, with many students in the governmental agencies enrolling in these programs. In a market study conducted by the faculty at Virginia Tech, which surveys around 200 mid-level professionals/executives within the DC area in Federal government agencies and government contractors, reveals a 5-7% interest level. We should note that this reflects

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[1] https://www.bls.org/ooh

[2] https://wtop.com/wp-content/uploads/2016/05/312455432-The-Trends-in-Workforce-Demand-Report-by-the-Metropolitan-Washington-COG.pdf

the potential demand for only a subsample of the government sectors (and only in the DC area), and hence, the evidence for demand is encouraging. Anecdotally, we have gauged potential interest from our advisory board members and have found there is strong demand to upskill and apply data science in their corresponding fields.

Lastly, we also conducted some benchmarking of the DBA programs from several peer institutions – see attached Excel spreadsheet titled, "6_DBA Benchmark Data."

Taken together, this data provides clear indication that there is increasing demand for DBA programs in the recent years, with the DC metropolitan area containing a particularly strong demand.

5. **How realistic is it for working executives to complete four seminars a semester?**

   We expect 90% of the DBA cohort will be part-time students, and hence our courses will be primarily in the evenings and on the weekends. Some of the courses will be cross-listed with existing courses in the Master's program, which already offer sections with evening and weekend options. During the first two years, students will on average take 10 credits each semester. This is similar to the current model for our part-time MBA students, which take 8-10 credits each semester, with two courses in each 7-week term over a 14-week semester. The DBA program will be structured similarly – i.e., students will generally take no more than two courses (or two courses plus an independent study) at any point in time during the first two years. A majority of our part-time MBA students also work full-time and are able to manage this schedule. Additionally, we should note that the schedule for the special topic courses and independent studies, which can be 1-4 credits, is more flexible.

6. **Please describe how full-time and part-time students will be accommodated in terms of course load, scheduling and modality (online vs. on-campus).**

   We assume that 90% of the DBA students will be part-time. The preference is that all courses are expected to be in person and on campus (College Park). However, just as we adjusted to the current climate, courses can have blended learning components. Currently, some of the course work that will be cross-listed for the DBA program is offered on evenings and weekends. Since many of the courses already exist and offer various sections, DBA students will have the same options, whether they are part-time or full-time.

7. **What is the maximum number of years it would take a student to complete this program?**

   Full-time DBA students are expected to complete the program in 3 years. Part-Time DBA students are also expected to complete the program in 3 years, but with some options extend to four years. No student will be allowed to take more than 5 years to complete all required courses in the program.

8. **How will issues of intellectual property work with the capstone projects?**

   UMD Legal has created proforma and official agreements, which are routinely used for undergraduate and graduate students working on experiential learning projects. These would be used for students utilizing data from their companies or any other companies.

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Establish a Post-Baccalaureate Certificate in Remote Sensing (PCC 20101)

PRESENTED BY	**Valérie Orlando, Chair, Senate Programs, Curricula, and Courses Committee**
REVIEW DATES	**SEC – August 26, 2021 | SENATE – September 8, 2021**
VOTING METHOD	**In a single vote**
RELEVANT POLICY/DOCUMENT	**N/A**
NECESSARY APPROVALS	**Senate, President, University System of Maryland Chancellor, and Maryland Higher Education Commission**

ISSUE

The College of Behavioral and Social Sciences' Department of Geographical Sciences proposes to establish a Post-Baccalaureate Certificate in Remote Sensing. The purpose of this certificate is to provide advanced education and training in collecting, processing, analyzing, and visualizing geospatial data through remote-sensing platforms, such as satellite images, aerial photos, and drone images. Students in this program will take courses that cover all major aspects of remote sensing, including digital image processing and analysis, working with Lidar, drones for data collection, and also computer programming that is critical for data processing and analysis. Students will develop a good understanding of how remote sensing is applied to real-world problems, and graduates will have the necessary knowledge and skills to work as remote sensing professionals and specialists.

The program is 12 credits, including a core set of courses consisting of 9 credits, and 3 credits from a list of electives:

- GEOG652 Digital Image Processing and Analysis (3 Credits)
- GEOG660 Advanced Remote Sensing Using Lidar (3 Credits)
- GEOG666 Drones for Data Collection (3 Credits)
- One of the following 3-credit courses:
    - GEOG646 Programming for GIS
    - GEOG656 Advanced Programming for GIS
    - GEOG653 Spatial Analysis
    - GEOG654 GIS and Spatial Modeling
    - GEOG663 Big Data Analytics

The Department of Geographical Sciences already offers a Master of Science in Geospatial Information Sciences. All of the courses for the proposed certificate program are currently offered through the master's program. Consequently, the instructional and administrative resources for this program already exist. This certificate program will allow students who may not want to enroll in a master's program to earn a graduate credential in remote sensing. Some students may already have a master's degree, but lack this specific training. Given the high concentration of governmental, non-profit, and private organizations that work with geospatial information sciences in

the Baltimore-Washington region, it is expected that demand will be high for this program. The program will be supported by tuition revenue.

This proposal was approved by the Graduate School Programs, Curricula, and Courses committee on May 3, 2021, and the Senate Programs, Curricula, and Courses committee on May 7, 2021.

RECOMMENDATION

The Senate Committee on Programs, Curricula, and Courses recommends that the Senate approve this new certificate program.

COMMITTEE WORK

The committee considered this proposal at its meeting on May 7, 2021. Jack Ma and Kristen Bergery from the Department of Geographical Sciences presented the proposal and answered questions from the committee. The proposal was approved by the committee.

ALTERNATIVES

The Senate could decline to approve this new certificate program.

RISKS

If the Senate declines to approve this certificate program, the university will lose an opportunity to establish a desired certificate program from courses that already exist within an active master's program.

FINANCIAL IMPLICATIONS

Because this program is self-supported, there are no significant financial implications for this proposal.

767: GRADUATE CERTIFICATE IN REMOTE SENSING

In Workflow

1. D-GEOG Curriculum Manager (bmarroqu@umd.edu; kbergery@umd.edu; rberndts@umd.edu)
2. D-GEOG PCC Chair (loboda@umd.edu; sineadf@umd.edu; ddwang@umd.edu)
3. D-GEOG Chair (loboda@umd.edu; rberndts@umd.edu)
4. BSOS Curriculum Manager (khall@umd.edu; gdenbow@umd.edu)
5. BSOS PCC Chair (khall@umd.edu)
6. BSOS Dean (khall@umd.edu; krussell@umd.edu; jmcgloin@umd.edu)
7. Academic Affairs Curriculum Manager (mcolson@umd.edu)
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9. Graduate PCC Chair (aambrosi@umd.edu)
10. Dean of the Graduate School (sfetter@umd.edu; aambrosi@umd.edu)
11. Senate PCC Chair (mcolson@umd.edu; vorlando@umd.edu)
12. University Senate Chair (mcolson@umd.edu)
13. President (mcolson@umd.edu)
14. Chancellor (mcolson@umd.edu)
15. MHEC (mcolson@umd.edu)
16. Provost Office (mcolson@umd.edu)
17. Graduate Catalog Manager (aambrosi@umd.edu)

Approval Path

1. Thu, 04 Feb 2021 14:19:17 GMT
   Byron Marroquin (bmarroqu): Approved for D-GEOG Curriculum Manager
2. Thu, 04 Feb 2021 14:52:41 GMT
   Tatiana Loboda (loboda): Approved for D-GEOG PCC Chair
3. Mon, 08 Feb 2021 22:36:41 GMT
   Tatiana Loboda (loboda): Approved for D-GEOG Chair
4. Tue, 09 Feb 2021 19:43:19 GMT
   Kristi Hall (khall): Approved for BSOS Curriculum Manager
5. Tue, 23 Feb 2021 17:21:04 GMT
   Kristi Hall (khall): Approved for BSOS PCC Chair
6. Tue, 23 Feb 2021 17:56:58 GMT
   Jean McGloin (jmcgloin): Approved for BSOS Dean
7. Tue, 27 Apr 2021 18:07:36 GMT
   Michael Colson (mcolson): Approved for Academic Affairs Curriculum Manager
8. Mon, 03 May 2021 20:47:34 GMT
   Angela Ambrosi (aambrosi): Approved for Graduate School Curriculum Manager
9. Mon, 03 May 2021 20:48:34 GMT
   Angela Ambrosi (aambrosi): Approved for Graduate PCC Chair
10. Fri, 07 May 2021 20:22:20 GMT
    Steve Fetter (sfetter): Approved for Dean of the Graduate School
11. Sat, 08 May 2021 16:40:26 GMT
    Valerie Orlando (vorlando): Approved for Senate PCC Chair

New Program Proposal

Date Submitted: Thu, 04 Feb 2021 01:20:18 GMT

Viewing: 767 : Graduate Certificate in Remote Sensing
Last edit: Wed, 14 Apr 2021 14:09:34 GMT

Changes proposed by: Jianguo Ma (jma3)

Program Name

Graduate Certificate in Remote Sensing

Program Status

Proposed

Effective Term

Fall 2021

Catalog Year

2021-2022

Program Level

Graduate Program

Program Type

Post-Baccalaureate Certificate

Delivery Method

On Campus

Departments

Department
Geography

Colleges

College
Behavioral and Social Sciences

Degree(s) Awarded

Degree Awarded
Certificate, Post-Baccalaureate

Proposal Contact

Jianguo Ma

Proposal Summary

The MS in Geospatial Information Sciences (MSGIS) program has been one of the biggest graduate level GIS programs in the country since 2008 and offers both a MS degree and also a Graduate Certificate in GIS. We are proposing to add a Graduate Certificate in Remote Sensing track in this exiting program to reflect both the needs by potential students and the demand by employers.

(PCC Log Number 20101)

Program and Catalog Information

Provide the catalog description of the proposed program. As part of the description, please indicate any areas of concentration or specializations that will be offered.

The MSGIS program is designed to provide advanced education and training using the most up-to-date knowledge and skills from the field of geospatial sciences including GIS, remote sensing, and computing. The MSGIS curriculum is beyond GIS and includes remote sensing, statistics, and computing as well. The topics cover spatial analysis, spatial statistics, computer programming and scripting, spatial databases, GIS modeling, remote sensing, Web GIS, mobile GIS, big data analytics, drones for data collection, open source GIS, etc.

This specific Graduate Certificate in Remote Sensing program will concentrate on teaching of science and technology for collecting, processing, analyzing, and visualizing geospatial data through remote sensing platforms such as satellite images, aerial photos, and drone images. The students in this certificate program will learn both the concepts and technical skills to be able to work as a Remote Sensing specialist. Totally four courses (12 credits) related to topics of Remote Sensing are required to complete this graduate certificate.

Catalog Program Requirements:

Course	Title	Credits
Core Courses		
GEOG652	Digital Image Processing and Analysis	3

GEOG660	Advanced Remote Sensing Using Lidar	3
GEOG666	Drones for Data Collection	3
Elective Courses (choose one of the following):		**3**
GEOG646	Programming for GIS	
GEOG656	Advanced Programming for GIS	
GEOG653	Spatial Analysis	
GEOG654	GIS and Spatial Modeling	
GEOG663	Big Data Analytics	
Total Credits		**12**

****The material below is for the proposal review and will not appear in requirements section of the Graduate Catalog*****

The four courses required to complete this graduate certificate are as follows:

Core courses:

GEOG652 - Digital Image Processing and Analysis (3 credits)

GEOG660 - Advanced Remote Sensing using Lidar (3 credits)

GEOG666 - Drones and Data Collection (3 credits)

Elective course (choose one from the list below):

GEOG646 - Intro to Programming for GIS (3 credits)

GEOG646 - Advanced Programming for GIS (3 credits)

GEOG653 - Spatial Analysis (3 credits)

GEOG654 - GIS and Spatial Modeling (3 credits)

GEOG663 - Big Data Analytics (3 credits)

Sample plan. Provide a term by term sample plan that shows how a hypothetical student would progress through the program to completion. It should be clear the length of time it will take for a typical student to graduate. For undergraduate programs, this should be the four-year plan.

A student in this graduate certificate program can study part time and take one course per term. This will take the student to complete the program in 12 months. A sample study plan is as follows:

Fall 2021: GEOG652

Winter 2021-2022: GEOG660

Spring 2022: GEOG646

Summer 2022: GEOG666

List the intended student learning outcomes. In an attachment, provide the plan for assessing these outcomes.

Learning Outcomes
The learning outcomes of students in the Graduate Certificate in Remote Sensing program: 1. Understand the big picture of remote sensing as a disciplinary field, with a good understanding of its history, current state, and future development trend. 2. Grasp of the connections between different geospatial technology components such as GIS, remote sensing, computing, and emerging software and hardware options, e.g. drones and artificial intelligence. 3. Develop a good understanding of how remote sensing is applied to real-world problems. 4. Develop proficiency in the following specific knowledge and skills: a. Collecting spatial data through various remote sensing platforms b. Processing remote sensing data using software such as ENVI c. Be able to interpret remote sensing data d. Be able to analyze remote sensing data e. Be able to automate the data processing and analyzing through computer programming and scripting with languages such as Python f. Have a good understanding about analysis of big data with high performance computing, especially spatial data in large volume and high velocity

New Program Information

Mission and Purpose

Describe the program and explain how it fits the institutional mission statement and planning priorities.

The University of Maryland (UMD), College Park is a flagship public institution that is centrally located in the Baltimore-Washington corridor. There are more GIS and Remote Sensing related activities and needs in this region than anywhere else in the country because of the high concentration of federal agencies, NGOs, and private sectors in geospatial field. UMD is particularly well positioned to play a strong role in geospatial research and

education given the long heritage of innovating in the development and application of geographic information systems for public, government, and commercial uses.

Adding to our existing MS in Geospatial Information Science program, this new graduate certificate in Remote Sensing track will help provide much needed education and training to prospective students and meet the demand by the local employers.

Program Characteristics

What are the educational objectives of the program?

The students in this certificate program will take courses that cover all major aspects of remote sensing including digital image processing and analysis; working with Lidar, drones for data collection, and also computer programming that is critical for data processing and analysis. The graduates will have necessary knowledge and skills to work as a Remote Sensing professional and specialist.

Describe any selective admissions policy or special criteria for students interested in this program.

General application documents:
(1) Transcript(s)
(2) Statement of Purpose

Program-specific application documents:
(1) Letters of Recommendation (2)
(2) CV/Resume
(3) Prerequisite requirement. To gain admission, applicants are not required to have
any GIS or remote sensing background. However, before a student can start the program, he/she needs to meet the prerequisite requirement: an introductory course in GIS or professional experiences working with GIS.

Summarize the factors that were considered in developing the proposed curriculum (such as recommendations of advisory or other groups, articulated workforce needs, standards set by disciplinary associations or specialized-accrediting groups, etc.).

The MSGIS program has been offering advanced education and training in geospatial technology since 2008. The curriculum covers GIS, remote sensing and computer programming. There are a few factors that contribute to this proposal of adding a Graduate Certificate in Remote Sensing.
(1) There have always had some inquiries from prospective students who are specifically interested in graduate studies in remote sensing. While it is easier to find graduate programs in GIS, it is not the case for similar programs in remote sensing.
(2) There also have been consistent demand for professionals who have knowledge and skills in remote sensing. More importantly, a lot of such demand by employers are in DC area because of the high concentration of federal government agencies and NGOs.
(3) Our department is one of the top ones in the field of remote sensing research. In one of the rankings, we are the #2 worldwide. Therefore, it is important to take advantage of this academic strength.

In summary, we would like to create this graduate certificate program to meet the needs and demand by prospective students and also employers. In addition, we want to further expand on our existing strength in remote sensing research in our department and on campus.

Select the academic calendar type for this program (calendar types with dates can be found on the Academic Calendar **(**https://www.provost.umd.edu/calendar/**) page)**

Approved 12-Week Term

Identify specific actions and strategies that will be utilized to recruit and retain a diverse student body.

UMD has stated goals for recruiting and graduating a diverse population of graduate students in its strategic plan for diversity.
(1) We advertise and promote our programs through a variety of platforms including Google Ads, LinkedIn, etc. This will ensure we reach to prospective students of all background.
(2) We also participate in and present at various conferences to reach a wider audience.
(3) We particularly encourage students from underrepresented groups to apply.
(4) The program also works with alumni to help recruit for the program.

Retention efforts has focused on developing experiential learning opportunities for students as well as ensuring that the curriculum is up-to-date given the evolution of this technical field.

Relationship to Other Units or Institutions

If a required or recommended course is o#ered by another department, discuss how the additional students will not unduly burden that department's faculty and resources. Discuss any other potential impacts on another department, such as academic content that may significantly overlap with existing programs. Use space below for any comments. Otherwise, attach supporting correspondence.

N/A

Accreditation and Licensure. Will the program need to be accredited? If so, indicate the accrediting agency. Also, indicate if students will expect to be licensed or certified in order to engage in or be successful in the program's target occupation.

Our university is a member of University Consortium for Geographic Information Science (UCGIS), but this program will not need accreditation.

Describe any cooperative arrangements with other institutions or organizations that will be important for the success of this program.

N/A

Faculty and Organization

Who will provide academic direction and oversight for the program? In an attachment, please indicate the faculty involved in the program. Include their titles, credentials, and courses they may teach for the program.

The MS GIS program including this proposed certificate program is oversight by the faculty in the department of Geographical Sciences, along with a Program Oversight Committee. Administration and day-to-day management are provided through the University of Maryland Center for Geospatial Information Science (CGIS). Members of the Program Oversight Committee include the Graduate Director (Prof. Laixiang Sun), and the CGIS director (Prof. Kathleen Stewart). The administrative and teaching team is led by program director Dr. Jianguo ("Jack") Ma. The program will also form an "MS GIS Advisory Committee", comprised of about six faculty members, whose role will be to provide term-to-term guidance on the running of the program, strategic advice regarding future opportunities and curricular modifications, and oversight of the annual learning outcomes assessment evaluation.

See the attachment for more details on the faculty involved.

Indicate who will provide the administrative coordination for the program

Kristen Bergery
Assistant Director, Master of Science Programs
2108 LeFrak Hall
Department of Geographical Sciences
College Park, MD 20742
301.314.1883
Kbergery@umd.edu

Resource Needs and Sources

Each new program is required to have a library assessment prepared by the University Libraries in order to determine any new library resources that may be required. This assessment must be done by the University Libraries. Add as an attachment.

The University of Maryland Libraries has conducted an assessment of library resources required for the MSGIS program. The assessment concluded that the University Libraries are able to meet, with its current resources, the curricular and research needs of the program including this new Graduate Certificate program. See the attachment.

Discuss the adequacy of physical facilities, infrastructure and instructional equipment.

The current MSGIS program has facilities, infrastructure, and instructional resources in place. The Center for Geospatial Information Science has access to two 25-seat GIS labs with specialized software and hardware that allows students to engage in GIS training. The labs run a wide variety of commercial and open source software for GIS, remote sensing, statistical analysis, data access, image processing, mathematical analyses, graphics and 3D modeling, and software development. The program also has access to multiple high-performance computing resources.

Discuss the instructional resources (faculty, staff, and teaching assistants) that will be needed to cover new courses or needed additional sections of existing courses to be taught. Indicate the source of resources for covering these costs.

As the MSGIS program has been offered since 2008, faculty resources are already in place. The current MS GIS program has four full-time lecturers who are dedicated to teaching most of the classes offered in the curriculum. Part-time lecturers are used for some classes, especially during summer and winter terms. Adding this new graduate certificate program will not require new teaching resources or costs.

Discuss the administrative and advising resources that will be needed for the program. Indicate the source of resources for covering these costs.

As the MSGIS program has been offered since 2008, there are adequate administrative resources to cover the new graduate certificate program because it is a simple expansion. The expansion is also very moderate (about 5 students per year at the most). Therefore, adding this new graduate certificate program will not result in additional administrative costs.

Use the Maryland Higher Education Commission (MHEC) commission financial tables to describe the program's financial plan for the next five years. See help bubble for financial table template. Use space below for any additional comments on program funding.

The proposed Graduate Certificate program will be a part of the existing MSGIS program. The students will take courses currently being offered. Therefore, there will be almost no additional cost in terms of teaching and administration. It is equivalent to recruiting about 5 more students each year.

Tables 1 contains the details of resources and expenditures.

Implications for the State (Additional Information Required by MHEC and the Board of Regents)

Explain how there is a compelling regional or statewide need for the program. Argument for need may be based on the need for the advancement of knowledge and/or societal needs, including the need for "expanding educational opportunities and choices for minority and educationally disadvantaged students at institutions of higher education." Also, explain how need is consistent with the Maryland State Plan for Postsecondary Education **(**https://mhec.state.md.us/About/Documents/2017.2021%20Maryland%20State%20Plan%20for%20Higher%20Education.pdf**).**

The University of Maryland (UMD), College Park is in a unique geographical location because it is centrally placed in the Baltimore-Washington corridor. There are more GIS and Remote Sensing related activities and needs in this region than anywhere else in the country because of the high concentration of federal agencies, NGOs, and private sectors in geospatial field. For example, NASA and NOAA are two of the most important users of remote sensing data from various sources such as satellite images, aerial photos, etc. UMD is particularly well positioned to play a strong role in geospatial research and education. Our Department of Geographical Sciences is well known for research in remote sensing and recognized as a leader worldwide. Therefore, UMD has all the resources to take the charge and play an important role in this field both in the State of Maryland and nationwide.

Adding to our existing MS in Geospatial Information Science program, this new graduate certificate in Remote Sensing track will help provide much needed education and training to prospective students and meet the demand by the local employers.

Is the proposed Post-Baccalaureate Certificate derived entirely from the core requirements of an existing master's degree program?

No

Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program. Possible sources of information include industry or disciplinary studies on job market, the USBLS Occupational Outlook Handbook **(**https://www.bls.gov/ooh/**), or Maryland state** Occupational and Industry Projections **(**http://www.dllr.state.md.us/lmi/iandoproj/**) over the next five years. Also, provide information on the existing supply of graduates in similar programs in the state (use MHEC's Office of Research and Policy Analysis** webpage **(**http://mhec.maryland.gov/publications/Pages/research/**) for Annual Reports on Enrollment by Program) and discuss how future demand for graduates will exceed the existing supply. As part of this analysis, indicate the anticipated number of students your program will graduate per year at steady state.**

The need for a well-trained and nimble workforce in geospatial information sciences is growing, markedly. The US Bureau of Labor Statistics Occupational Outlook Handbook does not list geospatial information scientist as an occupation, but does project that jobs in a related category, cartographers and photogrammetrists, is growing "much faster than average" between 2016-2026. The Bureau lists the state of Maryland as one of the strongest states in the nation for jobs in the geographical sciences, mainly because of the prevalence of federal agencies.

Our current MS GIS program recruits about 50 students in total annually. We have high confidence that the enrollment of the proposed Graduate Certificate program will be about 5 students or more per year. This projection is based on inquires from prospective students and also feedback from past students. This will be a positive addition to our existing MSGIS program.

Identify similar programs in the state. Discuss any di#erences between the proposed program and existing programs. Explain how your program will not result in an unreasonable duplication of an existing program (you can base this argument on program di#erences or market demand for graduates). The MHEC website can be used to find academic programs operating in the state: http://mhec.maryland.gov/institutions_training/pages/HEPrograms.aspx

There are geographic information system (GIS) certificate programs in institutions in the state of Maryland (see attachment Remote Sensing Market Analysis V2), but remote sensing is the study of objects (mainly earth surface objects such as water bodies and vegetation for civil engineers), without being in contact with those objects, using imagery captured with help of electromagnetic radiation. A geographic information system is a computer-based tool for mapping and analyzing features and events on earth. GIS technology integrates common database operations, such as query and statistical analysis, with maps. A GIS program may or may not include components of remote sensing.

Discuss the possible impact on Historically Black Institutions (HBIs) in the state. Will the program affect any existing programs at Maryland HBIs? Will the program impact the uniqueness or identity of a Maryland HBI?

This proposed Graduate Certificate program will not impact Historically Black Institutions (HBIs) in the state. The reason is that this program is focused on Remote Sensing and there are no similar post-baccalaureate programs of Remote Sensing offered in those institutions. See attachment Remote Sensing Market Analysis V2.

Supporting Documents

Attachments

MSGIS Faculty.docx
Library Resource Assesment for MSGIS.docx
MSGIS Graduate Certificate in RS 5-Year Budget Analysis.xlsx
MSGIS_Assessment Plan - 2021.docx
Remote Sensing_Market_Research V2.xlsx
Remote Sensing_Employment_Projections.xlsx

Key: 767

MS in Geospatial Information Sciences (MSGIS) Program
Graduate Certificate in Remote Sensing

Appendix C: Faculty

Dr. Kathleen Stewart, Full-Time, Tenure Track

Kathleen Stewart is Director of the Center for Geospatial Information Science and works in the area of geographic information science with a particular focus on geospatial dynamics. This includes topics such as moving objects research (e.g., space-time trajectories, space-time scheduling) and event modeling for dynamic GIS. She is interested in mobility, spatial accessibility, big geospatial data, and currently investigates movement and mobility for a number of different application domains, for example, health and transportation. She is also interested in modeling geospatial semantics including geospatial ontologies and their role for geographic information system design, and spatiotemporal information retrieval. At the University of Maryland, Dr. Stewart is a member of the Program in Oncology at the University of Maryland Marlene and Stewart Greenebaum Comprehensive Cancer Center and also collaborates with researchers at the Institute for Global Health, the Center for Substance Abuse Research, the National Transportation Center, the School of Public Health, and among others. Her research is currently supported in part by grants from the National Institutes of Health, NASA, and the Federal Highway Administration, among other organizations, and she has also received support from IARPA, NGA and NSA. Dr. Stewart serves as a member of the Mapping Science Committee of the National Academies of Sciences, Engineering and Medicine and the Board of Directors for the University Consortium of Geographic Information Science. She is a member of the steering committee for the Maryland Transportation Institute. She also serves as a member of the editorial boards for The International Journal of Geographical Information Science (IJGIS), Computers, Environment, and Urban Systems, Transactions in GIS, Geographical Analysis, and the open-access Journal of Spatial Information Science (JOSIS).

Dr. Jianguo Ma, Full-Time, Professional Track

Dr. Ma is the Director and a Lecturer in the Department of Geographical Sciences at the University of Maryland, College Park. His teaching and research interest are focused on the application of Spatial Analysis, GIS modeling and Web GIS in the field of renewable energy and sustainable development as well as marketing analysis. His educational background includes PhD in Biological and Environmental Engineering from Cornell University (2005) and MS (2003) from Cornell University, MA from Peking University, BS in Geological Engineering from Beijing University of Science and Technology.
The courses that Dr. Ma teaches in the MS GIS program:
GEOG653 (Spatial Analysis), GEOG654 (GIS and Spatial Modeling), GEOG677 (Internet GIS), GEOG795 (GIS Professional Seminars), GEOG797 (Professional Project)

Dr. Jonathan Resop, Full-Time, Professional Track

Dr. Resop is a Senior Lecturer in the Department of Geographical Sciences at the University of Maryland. Jonathan earned his Ph.D. at Virginia Tech in Biological Systems Engineering. During

his time at Virginia Tech, he worked on multiple projects related to spatial modeling and remote sensing, in particular problems that involve agricultural and environmental systems. His dissertation involved applying ground-based lidar to various ecological applications. After completing his Ph.D. he worked as a post-doc for the USDA-ARS in Beltsville in the Crop Systems and Global Change Lab, doing research related to simulating the potential production capacity of crops within regional food systems using a geospatial crop model. Jonathan received his undergraduate degrees at the University of Maryland, College Park in Biological Resources Engineering and Computer Science.
The courses that Dr. Resop teaches in the MS GIS program:
GEOG654 (GIS and Spatial Modeling), GEOG656 (Programming and Scripting for GIS), GEOG660 (Advanced Remote Sensing with Lidar), GEOG797 (Capstone Project)

Dr. Eunjung Lim, Full-Time, Professional Track
Dr. Lim earned a Ph.D degree in Geography (GIS specialty) from the State University of New York at Buffalo. Her specialty is geographic information sciences. In the realm of GIS, she has developed special interest and knowledge in GIS modeling, programming, network analysis, and spatial statistics. She has about 12 years of experience developing software using Java, C, C++, Visual Basic and relational databases.
The courses that Dr. Lim teaches in the MS GIS program:
GEOG650 (Mobile GIS), GEOG651 (Spatial Statistics), GEOG656 (Programming and Scripting for GIS), GEOG657 (Web Programming), GEOG797 (Capstone Project)

Dr. Rejanne Le Bivic, Full-Time, Professional Track
Dr. Le Bivic is a Lecturer in the Department of Geographical Sciences at the University of Maryland. She earned her Ph.D. University of Western Brittany. During the PhD she focused on using Remote Sensing data to quantify the erosion processes in a volcanic tropical island: La Reunion, in the Indian Ocean. This led her to use a very broad range of data, from Terrestrial LiDAR, to aerial imagery, drone imagery and DGPS in a very remote area.
The courses that Dr. Le Bivic teaches in the MS GIS program:
GEOG652 (GIS and Spatial Modeling), GEOG646 (Introduction to Computer Programming for GIS), GEOG660 (Advanced Remote Sensing with Lidar), GEOG797 (Capstone Project)

Dr. Naijun Zhou, Full-Time, Professional Track
Dr. Zhou is a Senior Lecturer in the Department of Geographical Sciences at the University of Maryland. His teaching and research are focused on Web GIS, Databases, Geospatial semantics and ontology. His educational background includes BS in Photogrammetry and Remote Sensing, MS in GIS, Remote Sensing & Cartography, MS in Computer Science, and PhD in GIScience from the University of Wisconsin.
The courses that Dr. Zhou teaches in the MS GIS program:
GEOG652 (Digital Image Processing and Analysis), GEOG655 (Spatial Databases)

DATE: September 18, 2018

TO: Dr. Kathleen Stewart
Director of the Center for Geospatial Information Sciences
Department of Geographical Sciences

Dr. Jianguo Ma
MPS Program Director, Center for Geospatial Information Sciences
Department of Geographical Sciences

CC: Daniel Mack, Associate Dean of Collections, UMD Libraries
Maggie Saponaro, Head, Collection Development, UMD Libraries

FROM: Kelley O'Neal, GIS and Spatial Data Librarian, UMD Libraries

RE: Library Resources to Support New Program – a Master of Science in Geospatial Information Sciences (MS GIS)

We are providing this assessment in response to a proposal by the Department of Geographical Sciences in the college of Behavioral and Social Sciences to create a Master of Science in Geospatial Information Sciences (MS GIS). The MS GIS program requested a collections resources assessment from the University of Maryland Libraries to determine how well the Libraries support the curriculum of this proposed program.

Serial Publications

The University of Maryland Libraries subscribe to a large number of scholarly journals, almost all in online format, focusing on Geospatial Information Science and related topics including:

Remote Sensing and Image Processing

Remote Sensing of Environment
ISPRS Journal of Photogrammetry and Remote Sensing
IEEE Transactions on Geoscience and Remote Sensing
International Journal of Applied Earth Observation and Geoinformation
IEEE Applied Earth Observations and Remote Sensing
IEEE Geoscience and Remote Sensing Letters
International Journal of Remote Sensing

Geographic Information Science (GISc)

International Journal of Geographical Information Science
Journal of Geographical Sciences
Transactions in GIS

Computers & Geosciences
Journal of Spatial Science
International Journal of Digital Earth
GeoInformatica
Computers, Environment and Urban Systems
The Cartographic Journal
Geographical Analysis
Cartographica: The International Journal for Geographic Information and Geovisualization

Big Data Analytics and Computation

Big Data and Society
Computational Intelligence: An International Journal
Advances in Artificial Intelligence
Data Mining and Knowledge Discovery
Neural Networks
IEEE Transactions on Neural Networks

In cases in which the Libraries do not subscribe to a particular journal of interest, articles within that journal likely will be available through Interlibrary Loan.

In addition to subscriptions, the following open access journals are another valuable resource to the Master of Science in Geospatial Information Science program:

Remote Sensing
Public Library of Science One (PLOS One)
Journal of Spatial Information Science
International Journal of Spatial Data Infrastructures Research
Applied Computational Intelligence and Soft Computing

Databases

The Libraries' *Database Finder* (http://www.lib.umd.edu/dbfinder) resource offers online access to databases that provide indexing and access to scholarly journal articles, geospatial datasets, and other information sources. Databases relevant to the Master of Science in Geospatial Information Science program include:

Policy Map - Policy Map is a cloud-based GIS and geospatial data tool that provides access to over 15,000 indicators related to housing, crime mortgages, health, jobs, demographics, and education from more than 150 authoritative public and proprietary sources. Data is cleaned and standardized and updated regularly. The database includes basic GIS tools to create reports and maps.

Social Explorer - Social Explorer is a cloud-based GIS and geospatial data tool that provides access to demographic information about the United States from 1790 to present. Available data includes Census, Public Use Microdata Sample (PUMS), and American Community Survey (ACS). The database includes basic GIS tools to create reports, maps, and slide shows.

SimplyAnalytics – SimplyAnalytics is a cloud-based GIS and geospatial data tool that contains extensive data including demographic, historic census, business, health, real estate, housing, employment, consumer spending, and marketing (over 70,000 variables total). Users can create customized maps and reports. Data is available at the State, County, City, ZIP Code, Census Tract, and Block Group levels for custom trade areas and the entire United States.

LandScan Global Population Dataset - LandScan is a global population database that shows geographical distribution of population at one-kilometer resolution over an average 24 hour period. LandScan datasets are compiled annually using different information sources and analytical techniques and should ideally not be compared across years.

IEEE Xplore - Provides full-text access to IEEE transactions, journals, magazines and conference proceedings published since 1988 and all current IEEE Standards. Includes access to Bell Labs Technical journal Archive (BLTJA) 1922-2015.

Encyclopedia of Statistical Sciences (Wiley) - Covers topics in statistics, biostatistics, quality control, economics, sociology, engineering, probability theory, computer science, biomedicine, psychology, survey methodology, and many other areas. Includes the full text of the first and second print editions, plus the supplemental volumes. The entries are self-contained and easily understood by readers with a limited statistical background.

Also four multi-disciplinary databases, *Academic Search Ultimate, Nexis Uni, ScienceDirect,* and *Web of Science,* are good sources of articles relevant to this topic.

In most cases, these indexes offer full text copies of the relevant journal articles. In those instances in which the journal articles are available only in print format, the Libraries can make copies available to graduate students through either the Libraries' Scan & Deliver Program or via Interlibrary Loan.

Monographs

The Libraries acquire scholarly monographs regularly in geographical sciences and geospatial science and technology along with allied subject disciplines. Monographs not already part of the collection can usually be added upon request.

Even though most library research for this course/program likely will rely upon online journal articles, students may wish to supplement this research with monographs. Fortunately, more and

more monographs are available as e-books. Even in instances when the books are only available in print, graduate students will be able to request specific chapters for online delivery through the Libraries' Scan & Deliver program (Note: see below).

A search of the University of Maryland Libraries' WorldCat UMD catalog (http://www.lib.umd.edu) was conducted, using a variety of relevant subject terms. This investigation yielded sizable lists of citations of books that we own. I provide here some example subjects within the field of geospatial information sciences, title counts for those subjects, and some example monographs available within our holdings.

Geographic Information Systems (GIS) = 1,666

Imagery and GIS: best practices for extracting information from imagery (e-book) 2017
Geographic information science & systems (print) 2015
Geographic information systems in action (e-book) 2017
Geographic information systems (GIS): techniques, applications and technologies (e-book) 2014
Geographic information systems (GIS) for disaster management (e-book) 2015

Mobile GIS = 22

Information fusion and geographic information systems (IF & GIS' 2015): deep virtualization for mobile GIS (e-book) 2015
Building web and mobile ArcGIS Server applications with JavaScript: master the ArcGIS API for Java Script, and build exciting, custom web and mobile GIS applications with the ArcGIS Server (e-book) 2014
Geospatial computing in mobile devices (print) 2014

Web GIS = 26

Mastering ArcGIS Enterprise Administration (e-book) 2017
Getting to know web GIS (print) 2016
ArcGIS for JavaScript Developers by Example (e-book) 2016
Tile-based geospatial information systems: principles and practices (e-book) 2010

Remote Sensing = 4,590

Earth observation open science and innovation (e-book) 2018
Urban remote sensing (e-book) 2018
Satellite Earth observations and their impact on society and policy (e-book) 2017
Remote Sensing of Aerosols, Clouds, and Precipitation (e-book) 2017
Remote sensing image fusion: a practical guide (e-book) 2017

Image Processing = 4,851

Digital image processing (print) 2018
Automatic Target Recognition (e-book) 2018
Digital Image Processing and Analysis with MATLAB and CVIPtools, Third Edition (e-book) 2017
Multisensor Image Fusion and Data Mining for Environmental Remote Sensing (e-book) 2017

Spatial Statistics = 112

Spatial Analytics with ArcGIS (e-book) 2017
Spatial econometrics (e-book) 2017
Computational and statistical methods for analysing big data with applications (e-book) 2016
Stochastic geometry, spatial statistics and random fields: models and algorithms (print) 2015

Network Analysis = 1,113

Environment, Politics and Society (e-book) 2018
Networks of international trade and investment: understanding globalization through the lens of network analysis (print) 2018
GIS and the social sciences: theory and applications (e-book) 2018
Sociometrics and human relationships: analyzing social networks to manage brands, predict trends, and improve organizational performance (e-book) 2017

Big Data Analytics = 121

Practical big data analytics: hands-on techniques to implement enterprise analytics and machine learning using Hadoop, Spark, NoSQL and R (e-book) 2018
Big data analytics: tools and technology for effective planning (print) 2018
Earth observation open science and innovation (e-book) 2018
Big Data Analytics with Hadoop 3 Build highly effective analytics solutions to gain valuable insight into your big data (e-book) 2018

Python = 812

Beginning Data Analysis with Python And Jupyter Use powerful industry-standard tools to unlock new, actionable insight from your existing data (e-book) 2018
Hands-On Data Analysis with NumPy and Pandas Implement Python Packages from Data Manipulation to Processing (e-book) 2018
Hands-On Automated Machine Learning A beginner's guide to building automated machine learning systems using AutoML and Python (e-book) 2018

Mastering Geospatial Analysis with Python Explore GIS processing and learn to work with GeoDjango, CARTOframes and MapboxGL-Jupyter (e-book) 2018

ArcPy = 10

ArcPy and ArcGIS - Second Edition (e-book) 2017
Introduction to GIS programming and fundamentals with Python and ArcGIS (print) 2017
ArcPy and ArcGIS, geospatial analysis with python: use the ArcPy module to automate the analysis and mapping of geospatial data in ArcGIS (e-book) 2015
Python for ArcGIS (print) 2015
Programming ArcGIS with Python cookbook: over 85 hands-on recipes to teach you how to automate your ArcGIS for Desktop geoprocessing tasks using Python (e-book) 2015

A further search revealed that the Libraries' membership in the Big Ten Academic Alliance (BTAA) dramatically increases these holdings and citations. As with our own materials, graduate students can request that chapters be copied from these BTAA books if the books are not available electronically.

Geographic Information Systems (GIS) = 4,954

Mobile GIS = 44

Web GIS = 60

Remote Sensing = 12,287

Image Processing = 10,767

Spatial Statistics = 4,181

Network Analysis = 3,239

Big Data Analytics = 1,427

Python = 2,127

ArcPy = 11

Access Services: Scan & Deliver and Interlibrary Loan

These services offer online delivery of bibliographic materials that otherwise would not be available online. As a result, remote users who take online courses may find these services to be helpful. Scan & Deliver and Interlibrary Loan are available free of charge.

A special amenity for graduate students and faculty, the Scan & Deliver service scans and delivers journal articles and book chapters within three business days of the request--provided that the items are available in print on the UM Libraries' shelves or in microform. In the event that the requested article or chapter is not available on campus, Scan & Deliver will automatically refer the request to Interlibrary Loan (ILL). Interlibrary Loan is a service that enables borrowers to obtain online articles and book chapters from materials not held in the University System of Maryland.

Please note that one limitation of these services that might create some challenges for the online student is that the Libraries are not allowed to make online copies of entire books. The only way that a student can get access to a print copy of an entire book is to physically come to the Libraries and check out that book.

Additional Materials and Resources

In addition to serials, monographs and databases available through the University Libraries, students in the Master of Science in Geospatial Information Sciences will have access to a wide range of media, datasets, software, and technology. Library Media Services (http://www.lib.umd.edu/lms) houses media in a variety of formats that can be utilized both on-site and via ELMS course media. GIS datasets are available through the GIS and Spatial Data Center website (http://www.lib.umd.edu/gis) which includes the BTAA Geoportal (https://geo.btaa.org/). Statistical consulting and additional research support is available through the Research Commons (http://www.lib.umd.edu/rc) while technology support and services are available through the Terrapin Learning Commons (http://www.lib.umd.edu/tlc).

The subject specialist librarian for geographic information systems (GIS) and spatial data, Dr. Kelley O'Neal (kelleyo@umd.edu), also serves as an important resource to Geographical Sciences and the upcoming Master of Science in Geospatial Information Sciences program.

Other Research Collections

Because of the University's unique physical location near Washington D.C., Baltimore and Annapolis, University of Maryland students and faculty have access to some of the finest libraries, archives and research centers in the country vitally important for researchers in geospatial intelligence. These include the Library of Congress, the National Archives, National Agricultural Library, and the Smithsonian, to name just few.

Conclusion

With our substantial journals holdings and index databases, as well as additional support services and resources, the University of Maryland Libraries have resources to support teaching and learning in Geospatial Information Sciences. These materials are supplemented by a strong

monograph collection. Additionally, the Libraries' Scan & Deliver and Interlibrary Loan services make materials that otherwise would not be available online, accessible to remote users in online courses. As a result, our assessment is that the University of Maryland Libraries are able to meet the curricular and research needs of the proposed Master of Science in Geospatial Information Sciences program.

Budget Analysis: Graduate Certificate in Remote Sensing, MS GIS Program					
Program Revenue	AY 2021/22	AY 2022/23	AY 2023/24	AY 2024/25	AY 2025/26
I. Total Tuition Revenue	**$48,000**	**$48,960**	**$49,939**	**$50,938**	**$51,957**
A. Total Professional Students (annually)	5	5	5	5	5
1. Fall Cohort Enrollment 1st Year of matriculation	5	5	5	5	5
B. Total Credits (annually)	12.0	12.0	12.0	12.0	12.0
1. Cohort Courses 1st Year of matriculation	12.0	12.0	12.0	12.0	12.0
C. Per course rate; Assumes 2% increase	$800	$816	$832	$849	$866
Estimated Expenses	AY 2021/22	AY 2022/23	AY 2023/24	AY 2024/25	AY 2025/26
I. Total Instructional and Administration	**$3,500**	**$3,585**	**$5,142**	**$5,215**	**$5,290**
A. Instructional Totals	**$0**	**$0**	**$0**	**$0**	**$0**
1.Total Faculty Salaries [a x b]	**$0**	**$0**	**$0**	**$0**	**$0**
a. Total paid instructors per year	0.0	0.0	0.0	0.0	0.0
b. Instructor salary; assumes a 3% annual increase	85,000	87,550	90,177	92,882	95,668
2. Fringe Benefits (30%)	0	0	0	0	0
B. Academic Administration Totals	**$2,000**	**$2,040**	**$2,081**	**$2,122**	**$2,165**
C. Equipment, Materials and Supplies Totals	**$1,500**	**$1,545**	**$3,061**	**$3,093**	**$3,126**
Estimated equipment	1,000	1,030	1,061	1,093	1,126
Materials & Supplies	500	515	2,000	2,000	2,000
II. Marketing	**$2,000**	**$2,000**	**$2,000**	**$2,000**	**$2,000**
Estimated Marketing (by academic unit)	2,000	2,000	2,000	2,000	2,000
SUBTOTAL: DIRECT PROGRAM EXPENSES	**5,500**	**5,585**	**7,142**	**7,215**	**7,290**
III. Campus Administrative Fee	**$7,200**	**$4,896**	**$7,491**	**$7,641**	**$7,794**
15% of tuition revenue for OES administrative costs	7,200	4,896	7,491	7,641	7,794
Total Estimated Expenses	**$12,700.00**	**$10,481.00**	**$14,632.58**	**$14,855.84**	**$15,083.88**
Total Estimated Program Revenue	**$48,000**	**$48,960**	**$49,939**	**$50,938**	**$51,957**
Net Revenue	**$35,300**	**$38,479**	**$35,307**	**$36,082**	**$36,873**

Note: The proposed Graduate Certificate program will be a part of the existing MSGIS program. The students will take courses currently being offered. Therefore, there will be almost no additional cost in terms of teaching and administration. It is equivalent to recruiting about 5 more students each

MS in Geospatial Information Sciences (MSGIS) Program
Graduate Certificate in Remote Sensing

Assessment Plan

Student Learning Outcomes	**Assessment Measures and Criteria**	**Assessment Schedule**
1. Demonstrate continued retention of students and progress towards the graduate certificate completion.	**Measure**: Registrar's Enrollment Records **Criteria:** The majority (>80%) of existing students will be enrolled for courses each academic year.	2022 and then on a yearly basis
2. Students will demonstrate comprehension of knowledge and skills related to remote sensing	**Measure:** Successful completion of required courses **Criteria:** The majority (> 80%) of students will achieve a cumulative GPA of 3.0 or above	2022 and then on a yearly basis
3. Demonstrate completion of the certificate program.	**Measure**: Registrar's Graduation Records **Criteria**: The majority of students (>80%) will graduate within the five-year limit for graduate students.	2025 and then on a yearly basis
4. Students will assess the relevance of program content as it applies to their professional and educational needs. (The survey is web-based and students can submit their responses anonymously to encourage participation. The survey seeks to assess a student's experiences in the MSGIS Program regarding the quality of	**Measure:** An exit interview will be conducted with graduates to assess their overall satisfaction with the program.	2025 and then on a yearly basis

courses, the general program, faculty, and staff. The survey also collects information on employment at graduation.)	**Criteria:** The majority (80%) of students will correlate academic program offerings to their needs.	

OES In-House Market Research: Other Institution Comparison										
Program Name = Remote Sensing, GC										
Institution	Website	Delivery Method	Degree Name & Type (MPS, MA, MS, MPH, etc.)	# of Credits	Program Duration	Tuition (course or credit)		Target Population	Prior Education/ Pre-Requisites	
						Resident	Non-Resident			
Big Ten Institutions										
University of Illinois Springfield	https://www.uis.edu/gis/curriculum./graduatecertificate/	F2F	Geographic Information Systems, GC *includes 1 course in remote sensing	12 credits	Not specifically noted	$332/credit	$681.75/credit	The purpose of the certificate is to give students the opportunity to gain valuable GIS knowledg and skills that can be applied to careers in both academia and practice.	Applicants must hold a baccalaureate degree from an accredited institution and meet campus requirements for admission to graduate study. A minimum undergraduate GPA of 3.0 is required for admission	
Indiana University Bloomington	https://geography.indiana.edu/graduate/minor-certificate.html	F2F	Graduate Information Systems (GIS) and Remote Sensing, GC	15 credits	Not specifically noted	$407/credit	$1,330.41/credit	Our students in this concentration become GIS/RS professionals as environmental analysts, urban planners, university instructors, market analysts, cartographers, GIS librarians, disaster managers, and watershed/forest researchers.	The certificate in GIS and Remote Sensing requires that a student to be enrolled in a degree program at Indiana University.	
Penn State University Park	https://gis.e-education.psu.edu/remotesensing	Online	Remote Sensing and Earth Observation, GC	12 credits	1 year	$997/credit	$1,655/credit	Designed for GIS practitioners who lack formal education in the technologies and methods associated with remote sensing, image analysis, and terrain modeling. Students who subsequent apply and are accepted to our Master of GIS Program may count the 12 certificate credits toward the degree. Our remote sensing certificate program can also help qualify and prepare professionals for additional credentials issued by GISP(link is external), ASPRS(link is externa and USGIF.	Anyone with a baccalaureate degree is eligible to enroll in the Penn State Graduate Certificate Remote Sensing and Earth Observation as a non-degree graduate student. Under certain circumstances, students without a degree may also enroll in courses.	
State of Maryland System Institutions: Overseen by MHEC(http://mhec.maryland.gov/publications/Pages/research/index.aspx)										
Bowie State University	https://bowiestate.edu/academics/colleges/college-of-arts-and-sciences/departments/computer-science/certificate/	F2F	Computer Science, GC Geographical Information Systems and Image Processing, GC	12 credits	Not specifically noted	$423/credit	$709/credit	Designed to strengthen the expertise of professionals in key computer science areas. Graduates of the program will be better able to contribute to the rapidly changing technological work environment of the local economy. Students study computer-based systems for storing, retrieving, analyzing and displaying complex spatial data. Students also learn image processing techniques for finding relations between survey maps and images from remote sensing devices, for environmental monitoring and for land use development.	A baccalaureate degree from an accredited institution and completion of the following courses in mathematics and computer science: Calculus of one variable (e.g. Calculus I and II), one additional mathematics course beyond Calculus, (e.g. Linear Algebra, Differential Equations, Abstract Algebra, Advanced Calculus, Discrete Structures or Probability and Statistics and COSC 503 - Software Design and Development (or equivalent).	Students admitted for the certificate program would also be admitted to the master's degree program; certificate courses count toward the master's degree, and the certificate student could easily switch to the degree option.
Hood College	https://www.hood.edu/graduateacademicsprograms/geographic-information-systems-c	F2F	Geographic Information Systems, GC *Environmental Biology Focused Program *Includes a 1-credit Remote Sensing Course.	18 credits	Not specifically noted	$490/credit		The Geographic information systems certificate program is precisely focused on environmental biology. The program builds high-demand expertise in the use of computerized cartography and spatially referenced databases. In fact, most job postings in the field include GIS as an emphasis and even as a qualification requirement.	It is recommended that entering students have completed undergraduate course work in the following: Biology (2 semesters, with lab) Chemistry (2 semesters, with lab) Mathematics (1 semester)	
Johns Hopkins University	https://advanced.jhu.edu/academics/certificates/geographic-information-systems/certificate-requirements-and-courses/	Curriculum does not include any remote sensing or data imaging coursework. The masters program does include this content but is not comparable to a graduate certificate.								
Colleges & Universities in the Washington DC - Baltimore MD area										
George Mason	https://catalog.gmu.edu/colleges-schools/science/geography-geoinformation-science/remote-sensing-imagee-processing-graduate-certificate/	F2F	Remote Sensing and Image Processing, GC	15 credits	Not specifically noted	$870.75/credit	$1,758.75/credit	Ideal candidates for this certificate are those who have a background in Earth and environmental sciences and are working in or planning to enter into the field of remote sensing, Earth observing, or image processing.	Applicants should hold a BA or BS degree in a discipline related to the science and applications of remote sensing from a regionally accredited university, with a minimu GPA of 3.00. Applicants should have some prior education or training in remote sensing or image processing. Students with a background in one of the physical scienc (physics, chemistry, atmospheric science, hydrology, or geology), geography, or environmental science will be particularly well-suited to undertake this program. Applicants should have an undergraduate background that includes courses in differential and integral calculus, and they should possess working knowledge of a computer programming language.	
Virginia Tech	https://rsigep.frec.vt.edu/certificate.html	F2F	Remote Sensing, GC	10 credits	Not specifically noted	$761.25/credit	$1,534/credit	Prepares students not only in the science of the Earth system but also in the engineering, data analytics, and social science perspectives required for the next generation of PhD scientists to work at the cutting edge of scientific inquiry.	This certificate program is open to all Virginia Tech graduate students who meet the certificate requirements.	
Other Major Institutions Offering Similar Programs										
Northeastern University	https://www.northeastern.edu/graduate/program/graduate-certificate-in-remote-sensing-online-262/	Online	Remote Sensing, GC	18-19 credits	6-12 months	$755/credit		Provides students with the necessary skills and understanding to apply remote sensing knowledge competently and effectively in a variety of areas. This certificate can stack into the Homeland Security or Geospatial Services master's degrees.	Bachelor's Degree.	
University of Connecticut	https://remotesensing.online.uconn.edu/	Online (asynchronous)	Remote Sensing and Geospatial Data Analytics, GC	12 credits	12-18 months	$825/credit		Professionals at all levels of civil government, land management, and science agencies, military and geo-intelligence, as well as engineering and environmental consulting groups, and other non-governmental organizations who are looking to build their geospatial technologies skills in order to advance their careers. College graduates with a Bachelor's degree in such areas as natural resources, forestry, engineering, geoscience, geography, environmental science, or ecology. Geographic Information Systems (GIS) professionals looking to take full advantage of remote sensing data in a wide range of GIS applications. Individuals in the workforce considering a Master's Degree program but feel they need more base-knowledge within the GIS and Remote Sensing field before applying.	A Bachelor's Degree or higher is required for admission. A background in GIS/remote sensing is helpful but not required.	**Graduate students who are seeking a degree can also enroll in a Graduate Certificate.

Five-Year Enrollment Trends		
Year	Bowie State University	Hood College
	Geographical Information Systems and Image Processing, GC	Geographic Information Systems, GC
2014	Students admitted for the certificate program are also automatically admitted to the master's degree program; certificate program enrollment not included on MHEC report.	5
2015		3
2016		7
2017		7
2018		6
2019		3
Projected		

Five-Year Degree Recaps		
Year	Bowie State University	Hood College
	Geographical Information Systems and Image Processing, GC	Geographic Information Systems, GC
2014	Students admitted for the certificate program are also automatically admitted to the master's degree program; MHEC report has no data for degrees.	5
2015		3
2016		7
2017		7
2018		6
2019		3

OES In-House Market Research				
Program Name = Remote Sensing, GC				
Occupation	**# of Jobs in the Field**	**Professional Salary Information**	**Projected Job Growth**	
Information from U.S. Bureau of Labor Statistics' Occupational Outlook Handbook				
Remote Sensing Scientists and Technologists	22,800 (2019)	$109,910/year $52.84 hourly	-2% (2019-2029)	https://www.onetonline.org/link/summary/19-2099.01
Operational Research Analysts	105,100	$84,810/year $40.78/hour	25% (much faster than average)	https://www.bls.gov/ooh/math/operations-research-analysts.htm
Information from State of Maryland's Occupational and Industry Projections				
Remote Sensing Scientists and Technologists	2,290 (2018)	$126,800/year	4% (2018-2028)	
Operational Research Analysts	4,710 (2018)	$98,760/year	27% (2018-2028)	

Review of the Interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy

PRESENTED BY	**John Lea-Cox, Chair**
REVIEW DATES	**SEC – August 26, 2021 | SENATE – September 8, 2021**
VOTING METHOD	**In a single vote**
RELEVANT POLICY/DOCUMENT	**III-6.20(A) – University of Maryland Grading Symbols and Notations Used on Academic Transcripts**
NECESSARY APPROVALS	**Senate, President**

ISSUE

In January 2021, the Senate leadership and Provost Rankin asked the SEC to consider a proposal to revise University policy and practice in order to better serve the University community, both in times of emergency and in normal circumstances. They also emphasized the importance of putting these provisions in place prior to the start of the Spring 2021 semester.

The SEC reviewed the proposed revision to the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (III-6.20[A]) to change the Pass minimum grade equivalent from a “D-” to a “C-” and the proposed Emergency Pass/Fail Guidelines that could be invoked by the President and Provost during any type of emergency. Following consultations with key administrators, a review of peer institution research, and extensive deliberation, the SEC recommended that the policy be amended as proposed and the proposed guidelines be approved. The SEC acted on behalf of the Senate to approve the amendment to the policy and the guidelines on January 21, 2021, prior to the start of the Spring 2021 semester. The amendment to the policy and the guidelines were subsequently approved by the President on January 25, 2021 on an interim basis pending Senate review, and were provided to the Senate as an information item at its February 9, 2021 meeting (Senate Document #20-21-32; Senate Document #20-21-33).

The SEC also approved a motion to charge the Academic Procedures & Standards (APAS) Committee with separate reviews of the interim policy and the emergency guidelines to include engagement of the campus community and the Senate before the policy and guidelines would be formally codified. After concerns were raised by the Office of the Registrar related to the application of the “W” grading symbol and following feedback from Interim Provost Wylie that the committee should consider the impact of the change of the Pass minimum to a “C-” and whether the change resulted in any unintended consequences, the Senate leadership amended the existing charge to the committee on March 12, 2021 and agreed to charge it with a separate review of the emergency guidelines following the APAS Committee’s review of the interim policy.

RECOMMENDATION(S)

The Academic Procedures & Standards Committee recommends that the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy be revised as shown immediately following this report.

The Academic Procedures & Standards Committee recommends that the effective date of the approved revised policy be January 24, 2022.

COMMITTEE WORK

The APAS Committee began its review of the charge (Appendix 1) at its meeting on February 1, 2021, and subsequently reviewed an updated charge dated March 12, 2021. The committee reviewed the SEC's action to recommend the amendment to the Pass minimum grade in January 2021 (Senate Document #20-21-32), and reviewed Pass minimum grade equivalents at Big 10 and other peer institutions. APAS consulted with representatives of the Office of the Senior Vice President and Provost, the Office of Undergraduate Studies, and the Office of the Registrar throughout its review. It also consulted with the Division of Information Technology and the Office of General Counsel.

The APAS Committee reviewed data from the Office of the Registrar on grade distributions over the past few semesters, so the committee could better understand how the emergency measures to institute a pass/fail grading method in Spring 2020 compared with use of the pass/fail method in other semesters. The committee also considered information on the impact of the pass/fail grading method on transfer students. The APAS Committee consulted with the Division of Information Technology on the technical difficulties and requirements of the change in the Pass minimum grade equivalent and the level of effort that would be required for any additional modifications.

APAS reviewed information on the Pass minimum grade equivalent at Big 10 and other peer institutions, as well as information on emergency measures taken by institutions due to the COVID-19 pandemic. During its review, APAS received feedback from administrators and faculty on the impact of the change from a Pass minimum of "D-" to "C-" by engaging with the Undergraduate Academic Programs (UGAP) Committee and the Undergraduate Programs Advising Committee (UPAC). The APAS Committee also consulted with the Senate Student Affairs Committee to gather student perspectives on the change of the Pass minimum grade equivalent.

ALTERNATIVES

The Senate could choose not to accept the recommendations. However, the University would lose an opportunity to clarify the application of the "W" grading symbol.

RISKS

There are no risks to the University in adopting these recommendations.

FINANCIAL IMPLICATIONS

There are no known financial implications to adopting these recommendations.

Review of the Interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy

2020-2021 Committee Members

John Lea-Cox (Chair)
Lindsey Barr (Graduate Student)
John Buchner (Faculty)
William Cohen (Ex-Officio Provost's Rep)
Linda Coleman (Faculty)
Nicole Coomber (Faculty)
Adrian Cornelius (Ex-Officio - University Registrar)
Alice Donlan (Staff)
Lee Friedman (Faculty)
Shannon Gundy (Ex-Officio - Director of Undergraduate Admissions)
Steve Halperin (Faculty)
Kayleigh Hasson (Undergraduate Student)
Lisa Kiely (Ex-Officio - Undergraduate Studies)
Marilee Lindemann (Faculty)
Kellie Rolstad (Faculty)
Anne Smithson (Faculty)
Monica VanKlompenberg (Faculty)

Date of Submission

August 2021

BACKGROUND

As a means to address student needs in the wake of the COVID-19 pandemic, in Spring 2020, the University moved to an all pass/fail grading model as the default while allowing students to choose to receive letter grades in specific courses, and removed all pass/fail restrictions for major and General Education requirements. The measures that the University put in place that semester were intended to be a one-time emergency response to the immediate issues related to the COVID-19 pandemic.

In Fall 2020, the University returned to its standard grading method and pass/fail guidelines. However, the extended duration of the continuing pandemic was not something that could have been foreseen. Students provided extensive feedback about the continued impact of the pandemic, which they believed required further accommodations and a return to some of the pass/fail provisions provided in Spring 2020.

In response to this feedback from the University community, Provost Rankin met with the Senate leadership to discuss these concerns and potential options associated with the pass/fail grading method. The Senate leadership provided suggestions that could both resolve concerns associated with the validity of a Pass grade and establish standard emergency guidelines that could be invoked by the President and Provost regardless of the type of emergency.

In January 2021, the Senate leadership and Provost Rankin asked the SEC to consider a proposal to revise University policy and practice in order to better serve the University community, both in times of emergency and in normal circumstances. They also emphasized the importance of putting these provisions in place prior to the start of the Spring 2021 semester.

The SEC reviewed the proposed revision to the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (III-6.20[A]) to change the Pass minimum grade equivalent from a "D-" to a "C-" and the proposed Emergency Pass/Fail Guidelines that could be invoked by the President and Provost during any type of emergency. Following consultations with

key administrators, a review of peer institution research, and extensive deliberation, the SEC recommended that the policy be amended as proposed and the proposed guidelines be approved. The SEC acted on behalf of the Senate to approve the amendment to the policy and the guidelines on January 21, 2021, prior to the start of the Spring 2021 semester. The amendment to the policy and the guidelines were subsequently approved by the President on January 25, 2021 on an interim basis pending Senate review, and were provided to the Senate as an information item at its February 9, 2021 meeting (Senate Document #20-21-32; Senate Document #20-21-33). The SEC also approved a motion to charge the Academic Procedures & Standards (APAS) Committee with separate reviews of the interim policy and the emergency guidelines to include engagement of the campus community and the Senate before the policy and guidelines would be formally codified. Following feedback from Interim Provost Wylie, the Senate leadership amended the existing charge to the committee and agreed to charge it with a separate review of the emergency guidelines following the APAS Committee's review of the interim policy.

CURRENT PRACTICE

Prior to the revisions that led to the interim policy, the Pass minimum grade equivalent in the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (III-6.20[A]) was set at a grade of "D-". A grade of D+,D, or D- denotes borderline understanding of the subject, marginal performance, and it does not represent satisfactory progress toward a degree. At the time, use of the pass/fail system was limited because of concerns that over-use of the pass/fail grading method would adversely affect students' progress towards mastery of their chosen major or could do real harm to a student's academic progress. Raising the Pass minimum grade equivalent from a "D-" to a "C-" was intended to mitigate those concerns and the fear that accreditation boards, graduate programs, or employers may not be willing to accept multiple semesters of P grades. The change to a "C-" was also intended to provide more opportunities for using the Pass/Fail grading system for Limited Enrollment Programs (LEPs) and hierarchical course series, and to align the University with the majority of Big 10 and other peer institutions.

COMMITTEE WORK

The APAS Committee began its review of the charge (Appendix 1) at its meeting on February 1, 2021, and subsequently reviewed an updated charge dated March 12, 2021 (Appendix 2) after concerns were raised by the Office of the Registrar related to the application of the "W" grading symbol and following feedback from Interim Provost Wylie that the committee should consider the impact of the change of the Pass minimum to a "C-" and whether the change resulted in any unintended consequences.

The committee reviewed the SEC's action to recommend the amendment to the Pass minimum grade in January 2021 (Senate Document #20-21-32), and reviewed Pass minimum grade equivalents at Big 10 and other peer institutions. APAS consulted with representatives of the Office of the Senior Vice President and Provost, the Office of Undergraduate Studies, and the Office of the Registrar throughout its review. It also consulted with the Division of Information Technology and the Office of General Counsel.

Early in its review, the committee met with representatives from the Office of the Registrar to review data on grade distributions over the past few semesters, so the committee could better understand how the emergency measures to institute a pass/fail grading method in Spring 2020 compared with use of the pass/fail method in other semesters. The committee learned that in Spring 2020 during the COVID-19 pandemic, 30 percent of undergraduate student grades were recorded using the

pass/fail grading method. That rate reflected a 29 percent increase in students who opted for pass/fail grading in the same semester in 2019, pre-pandemic. However, it is important to note that in Spring 2020 all students were automatically opted into pass/fail for all of their classes and were asked to opt out if they preferred to receive letter grades. In Fall 2020, when the emergency measures related to pass/fail grading were not in place, the percentage of undergraduate student grades that were recorded as pass/fail was very low. When the emergency measures were put in place in Spring 2020, graded courses showed a less than one percent instance of “D” grades, whereas in Fall 2020, 2 percent of grades were recorded as “D” grades. Spring 2020 also showed the same rate of “A” grades in 400-level courses as compared to the same semester pre-pandemic in Spring 2019. In Fall 2020, “A” grades were 9 percent more prevalent than the same semester in 2019, which could reflect an implementation of the direction to faculty to be more understanding with their students, or may show an impact of different expectations or assessment methods in courses held online.

The Registrar’s Office also provided information to the committee on the impact of the pass/fail grading method on transfer students. Students who transfer into the University will not be negatively impacted by the change in the Pass minimum grade equivalent. Students transferring from a Maryland public institution may transfer credits for courses where they earn a “D-” or higher. For students who transfer from a private institution or from an institution outside of the state of Maryland, the University only accepts credits for courses graded as Pass where the equivalent grade is a “C-” or higher. With the change of the Pass to a “C-” grade equivalent, there is an advantage for students when they transfer out because other institutions will be more willing to accept their credits with the higher standard.

APAS consulted with the Division of Information Technology on the technical difficulties and requirements of the change in the Pass minimum grade equivalent. DIT explained that the effort to change the Pass minimum required modifications to the Student Information System and other University databases, but the modifications were able to be made in time for Spring 2020 grades to be assigned. DIT cautioned that additional modifications to the policy to change the Pass minimum grade equivalent would require additional modifications to SIS, and would need time to implement. However, DIT faces no issues in implementing the current interim policy with the Pass minimum grade equivalent of a “C-”.

APAS reviewed information on the Pass minimum grade equivalent at Big 10 and other peer institutions (Appendix 3), as well as information on emergency measures taken by institutions due to the COVID-19 pandemic. Institutions use different terminology for their pass/fail grading methods, but after review, the committee found that the majority of the Big 10 institutions have a Pass minimum grade equivalent of a “C” or “C-” or better. These institutions include Illinois, Michigan, Minnesota, Nebraska, Penn State, Purdue, Rutgers, and Wisconsin. A few institutions use a grade of “D” or “D-” as the Pass minimum, including Indiana, Iowa, and Ohio State. Many institutions implemented temporary or emergency policies for the academic year or semesters affected by the COVID-19 pandemic; however, these temporary or emergency measures focused primarily on the regulations related to how many courses could be taken pass/fail and the deadlines associated with deciding on the pass/fail option, rather than on changing the Pass minimum. Most institutions seemed to retain the Pass minimum that they had in place prior to the pandemic.

During its review, APAS received feedback from administrators and faculty on the impact of the change from a Pass minimum of “D-” to “C-.” The Undergraduate Academic Programs (UGAP) Committee shared its perspective that a Pass minimum of “C-” retains the ability for students to explore courses widely without harming their GPA, and ensures that they earn a P only if they do

satisfactory work. UGAP noted that the pass/fail grading method can be useful to students returning to the University after a long break who need to regain skills with low risk, or to students who need elective credits but do not need a high grade. UGAP also noted that a Pass may be used in the resolution of an arbitrary and capricious grading case. The Undergraduate Programs Advising Committee (UPAC) stressed the importance of retaining the restrictions around the pass/fail grading method; the restrictions are meant to ensure that coursework is aimed at degree attainment and to prevent students from taking courses that do not help them towards that goal.

The APAS Committee also consulted with the Senate Student Affairs Committee to gather student perspectives on the change of the Pass minimum grade equivalent. The Student Affairs Committee had positive feedback on the change of the Pass minimum, noting that the change could lead to increased preparedness for the next level of courses. The Student Affairs Committee also noted that those who opt for the pass/fail grading method as a means of avoiding the rigor and workload of the course will, with the change, need to put in the work to understand at least core aspects of the course. Student Affairs Committee members also reported that the change to the Pass minimum has not affected their choices in the types of classes they select, and they feel that faculty and advisors have been very supportive in explaining the different options and their impacts during the pandemic, though they suggested that more guidance on how the pass/fail grading method can affect future career and graduate school opportunities would be helpful.

Despite its support of the change, the Student Affairs Committee did note that the change may impact a student's ability to explore new topics and ideas. The pass/fail grading method has typically benefited students who are interested in exploring new topics or learning new methods that are outside of their specific course of study. It allows students to focus more on the content and on what in particular they are seeking to learn, rather than on specific assignments or grading events. The Student Affairs Committee noted that the change from a "D-" to a "C-" may limit this ability, in that it raises the expectations for such students and requires them to focus more on their grade in the course. The committee noted that clearer guidance that differentiates between the audit option for courses and the pass/fail grading method may be helpful in clarifying the options students have to explore new topics and ideas. There was also a general concern expressed by members of the Student Affairs Committee about the upcoming reversion of the deadline for choosing the Pass/Fail option in Fall 2021 to the standard period of ten-days after the start of the semester. Student Affairs Committee members noted that the ability to delay this decision until Reading Day had, in fact, decreased their anxiety about the choice, especially because instructors had appeared to increase the expectations and rigor of online classes during the Spring 2021 semester.

In March 2021, following discussion between the Senate Leadership and the administration, the APAS Committee received a revised charge, asking that it also consider an issue with the grading symbol "W" that had been brought to its attention. The Office of the Registrar identified a long-standing issue with the wording of the policy related to the "W," which indicates that the "W" is used when a student withdraws from a course "by the end of the schedule adjustment period." In practice, the "W" is not applied unless a student withdraws after the schedule adjustment period; the schedule adjustment period is meant to allow students the freedom to add and drop courses without penalty. A review of past Senate action on the policy indicates that the error had been in place in the policy language since the policy's inception. At its meeting on March 22, 2021, after discussion of the issues involved with the "W," the committee agreed that this was an oversight in the policy language that should be revised in the course of its work.

In its charge, the APAS Committee was asked to consider whether there are any unintended consequences related to the recent amendment to change the Pass minimum grade equivalent

from a D- to a C-. In its amended charge, the committee was also asked to consider the impact of the amendment to change the Pass minimum grade equivalent on the undergraduate student experience. The APAS Committee found there were minor unintended consequences related to the impacts on transfer students, as well as on advisors and others who need to communicate the new policy to students, but no major concerns were raised related to unintended consequences in the course of its review. In its discussions, the APAS Committee did acknowledge that the higher Pass minimum may in a small way impact the ability of students to explore and test their capabilities. With the Pass at a D-, students were free to explore widely without harming their GPA or having to commit much effort to the courses themselves. However, APAS agreed that there is a higher benefit to ensuring that students who pass a course truly understand the content in some way, and found that receiving a D- does not demonstrate adequate understanding in order to pass the course. The committee found that the higher bar for a Pass would push students to put in more effort, and would prevent students from moving on to the next level of coursework without a solid foundation to support that work.

After due consideration, the APAS Committee voted to affirm its approval of the change in the Pass minimum grade equivalent from a “D-” to a “C-” at its meeting on April 16, 2021. The committee also voted to recommend a revision to the policy to clarify that the “W” grading symbol would be used when a student withdraws after the schedule adjustment period, and to recommend that the policy revision go into effect at the beginning of a semester to provide consistency to current students.

RECOMMENDATIONS

The Academic Procedures & Standards Committee recommends that the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy be revised as shown immediately following this report.

The Academic Procedures & Standards Committee recommends that the effective date of the approved revised policy be January 24, 2022.

APPENDICES

Appendix 1 — Original Charge from the Senate Executive Committee
Appendix 2 — Amended Charge Dated March 12, 2021
Appendix 3 — Peer Institution Data

III-6.20(A) UNIVERSITY OF MARYLAND GRADING SYMBOLS AND NOTATIONS USED ON ACADEMIC TRANSCRIPTS

(Approved by the President August 1, 1991; Amended June 8, 2001; Amended effective fall 2012; Technical Amendments May 4, 2016; Amended and approved on an interim basis by the President effective January 25, 2021, pending University Senate Action)

The following symbols are used on students' permanent records:

A+, A, A-	Denotes excellent mastery of the subject and outstanding scholarship. 4.0 quality points per semester hour for the grades of "A+" and "A" 3.7 quality points per semester hour for the grade of "A-"
B+, B, B-	Denotes good mastery of the subject and good scholarship. 3.3 quality points per semester hour for the grade of "B+" 3.0 quality points per semester hour for the grade of "B" 2.7 quality points per semester hour for the grade of "B-"
C+, C, C-	Denotes acceptable mastery of the subject. 2.3 quality points per semester hour for the grade of "C+" 2.0 quality points per semester hour for the grade of "C" 1.7 quality points per semester hour for the grade of "C-"
D+, D, D-	Denotes borderline understanding of the subject, marginal performance, and it does not represent satisfactory progress toward a degree. 1.3 quality points per semester hour for the grade of "D+" 1.0 quality points per semester hour for the grade of "D" 0.7 quality points per semester hour for the grade of "D-"
F	Denotes failure to understand the subject and unsatisfactory performance. 0.0 quality points per semester hour for the grade of "F"
S	This is a department option mark which may be used to denote satisfactory performance. This is not included in computation of cumulative average.
W	Used to indicate withdrawal from a course ~~by~~ **after** the end of the schedule adjustment period. This is not included in computation of cumulative average.
XF	Used to indicate failure due to academic dishonesty. Treated in the same way as "F" for the purposes of cumulative average.

Aud	A student may register to audit a course which has been designated as available under the audit option where space is available. This does not imply attendance or any other effort in the course.
Pass/Fail	The mark of "P" is a student option mark, equivalent to a grade of C- or better. The student must inform the registrar's office of the selection of this option by the end of the schedule adjustment period.
Incomplete	The mark of "I" is an exceptional mark that is an instructor option. It is only given to a student whose work has been qualitatively satisfactory, when, because of illness or other circumstances beyond the student's control, he or she has been unable to complete some small portion of the work of the course. In no case will the mark "I" be recorded for a student who has not completed the major portion of the work of the course.
Repeat	For information on the University's repeat guidelines for undergraduate students, consult the Undergraduate Catalog. For graduate students, departments may permit a student to repeat a course in an effort to earn a better grade. Whether higher or lower, the most recent grade will be used in computing the grade point average. All grades for graduate students remain as part of the student's permanent record.
Duplicate Course	This is used to indicate two courses with the same course content. The second course is counted in cumulative totals unless an exception is made by the dean.
Non-app	Used by the dean of the receiving college in cases of transfer from one college to another at UMCP to indicate courses in the previous academic program which are not applicable to the new program.
Excl Crd	Excluded credit is noted when academic clemency has been granted.

Appendix 1 - Original Charge from the Senate Executive Committee

UNIVERSITY SENATE | CHARGE

Charged: January 29, 2021 | Deadline: November 5, 2021

Review of the Interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (Senate Document #20-21-34)

Academic Procedures & Standards (APAS) Committee | Chair: John Lea-Cox

The Senate Executive Committee (SEC) and Senate Chair Dugan request that the Academic Procedures & Standards (APAS) Committee review the interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (III-6.20[A]).

Specifically, it asks that you:

1. Review the Amendment to the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (Senate Document #20-21-32).
2. Review the interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (III-6.20[A])
3. Review Big10 and other peer institution information regarding Pass minimum grade equivalents.
4. Consult with a representative of the Office of the Senior Vice President & Provost.
5. Consult with a representative of the Office of Undergraduate Studies.
6. Consult with a representative of the Office of the Registrar.
7. Consider whether there are any unintended consequences related to the recent amendment to change the Pass minimum grade equivalent from a D- to a C-.
8. Consult with the Office of General Counsel on any proposed policy revisions.
9. If appropriate, recommend whether additional guidance or revisions to associated policies or guidelines are necessary as a result of the recent revision to the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy.

We ask that you submit a report to the Senate Office no later than **November 5, 2021**. If you have questions or need assistance, please contact Reka Montfort in the Senate Office, extension 5-5804.

Appendix 2 - Amended Charge Dated March 12, 2021

UNIVERSITY SENATE | CHARGE

Charged: March 12, 2021 | Deadline: November 5, 2021

Review of the Interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (Senate Document #20-21-38)

Academic Procedures & Standards (APAS) Committee | Chair: John Lea-Cox

The Senate Executive Committee (SEC) and Senate Chair Dugan request that the Academic Procedures & Standards (APAS) Committee review the interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (III-6.20[A]).

Specifically, it asks that you:

1. Review the Amendment to the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (Senate Document #20-21-32).
2. Review the interim University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy (III-6.20[A])
3. Review Big10 and other peer institution information regarding Pass minimum grade equivalents.
4. Review the attached memo from the Office of the Registrar requesting a correction to the “W” description.
5. Consult with a representative of the Office of the Senior Vice President & Provost.
6. Consult with a representative of the Office of Undergraduate Studies.
7. Consult with a representative of the Office of the Registrar.
8. Consult with a representative from the Division of Information Technology.
9. Consider the impact of the amendment to change the Pass minimum grade equivalent from a D- to a C- on the undergraduate student experience.
10. Consider whether the description of a “W” should be revised to reflect the long-standing practice of when a “W” is applicable.
11. Consider whether there are any unintended consequences related to the recent amendment to change the Pass minimum grade equivalent from a D- to a C-.
12. Consult with the Office of General Counsel on any proposed policy revisions.
13. If appropriate, recommend whether additional guidance or revisions to associated policies or guidelines are necessary as a result of the recent revision to the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy.

14. Recommend whether a C- as the Pass minimum grade equivalent is appropriate, and recommend whether any revisions to the University of Maryland Grading Symbols and Notations Used on Academic Transcripts Policy are necessary.

We ask that you submit a report to the Senate Office no later than **November 5, 2021**. If you have questions or need assistance, please contact Reka Montfort in the Senate Office, extension 5-5804.

Attachment

UNIVERSITY OF MARYLAND
OFFICE OF THE REGISTRAR

Mitchell Building
First Floor
College Park, Maryland 20742
301.314.8240 TEL 301.314.9568 FAX

MEMORANDUM

To: Laura Dugan
Chair of the University Senate

From: Adrian Cornelius
University Registrar

Date: February 25, 2021

Re.: **Request for Additional Amendment to Grading Symbols and Notations Used on Academic Transcripts Policy**

Upon reviewing the university's Grading Symbols and Notations Used on Academic Transcripts Policy (III-6.20(A) to ensure the appropriate operationalization the "Pass/Fail" portion that was approved on an interim basis starting this Spring 2021, the Office of the Registrar came across an error (most likely a typo) in another portion of the Grading Symbols Policy that needs to be corrected. This relates to the "W" grading symbol.

The current description for the "W" grading symbol says:
*W - Used to indicate withdrawal from a course **by** the end of the schedule adjustment period. This is not included in computation of cumulative average.*

The correct verbiage ought to be:
*W - Used to indicate withdrawal from a course **after** the end of the schedule adjustment period. This is not included in computation of cumulative average.*

As highlighted in red above, this request for correction relates to one word in the description of the "W" symbol, i.e. changing "by" to "after."

The university's student records and academic transcripts have been reflecting the "W" symbol for course drops after the schedule adjustment period for decades and this practice is correctly articulated in our AcademicCatalog and in other resources on the Office of the Registrar website.

Moreover, our students don't receive (and never have received) a "W" symbol on their record when they drop a course by the end of the schedule adjustment period.

Given that the APAS is currently in deliberations on the "Pass/Fail" portion of (III-6.20(A), I would like to recommend that an amendment to the description of the "W" symbol be added to the current charge to correct this decades-old "typo." There is no impact beyond the one-word change in the policy, as all of our practices, systems coding, and stakeholders' understanding that the "W" symbol happens after schedule adjustment are aligned with this requested correction, as is clearly articulated in all our other guiding documentations.

Thank you very much for your kind consideration of this request.

Appendix 3 - Peer Institution Research

	Maryland	Illinois	Indiana	Iowa	Michigan	Michigan State	Minnesota	Nebraska	Ohio State: AU20	Ohio State: SP21	Pensylvania State	Purdue	Rutgers	Wisconsin
PASS or SATISFACTORY GRADE EQUIVALENCE	D- or higher	C- or higher to earn Credit.	D- or higher	D- or higher	C- or higher	1.0 or higher	C- or higher = S; anything lower = N	C or higher = P	PA=D or higher	PE=D or D+ and is an Emergency Pass (At OSU, we use E for F/failing grades so they did not want to start the emergency grade with E.)	COVID-specific options include SAT = C or better, V = D, Z = F	P = Pass equivalent to C- or higher	Pass = C or higher No Credit = D or F	C or higher required for a grade of S
Is this part of the regular policy or an emergency/temprary policy	Regular policy	Temporary Academic Policy Modification due to COVID	Regular policy	Regular policy (no special grading policy for Fall 2020 or Spring 2021 due to COVID)	Temporary policy for AY 20-21	Temporary AY 20-21	Regular policy (see temp policy below)	Regular policy	PA/NP is a regular policy that we revised for AU20 (there was also a different variation for SP20, but nothing for SU20)	new emergency/temp policy. there has already been a request to allow in SU21 as well	Emergency/ Temporary policy for Spring 2021.	Regular policy	Emergency policy	Regular policy
Notes	Modified by Interim Policy prior to start of Spring 2021 semester	The temporary policy impacts deadlines and whether Credit/No-Credit options are available for certain course; the Credit minimum grade equivalent was C- or higher in the Student Code already.			Unclear, but no indication that the Credit minimum was lower than C- prior to the temporary policy.	Michigan State uses a numerical system for grading. It seems as if the S/NS option was provided for the first time due to the COVID-19 pandemic.					This is in addition to an existing pass/fail policy. Contacts say that the pass/fail policy too restricted to be useful to students, so the Senate is considering permanent changes.	There was a COVID-related policy change for Pass/NotPass, but the Pass minimum remained a C- or better.	The Pass minimim was in effect prior to the temporary policy changes as a C or higher.	

UNIVERSITY SENATE | TRANSMITTAL | #21-22-05

Senate Leadership

Revision to the Senate Bylaws to Extend the Term of the Special Committee on University Finance (SCUF)

PRESENTED BY	**Rochelle Newman, Chair-Elect**
REVIEW DATES	**SEC – August 26, 2021 | SENATE – September 8, 2021**
VOTING METHOD	**In a single vote by a 2/3 majority of the Senate**
RELEVANT POLICY/DOCUMENT	**Bylaws of the University Senate**
NECESSARY APPROVALS	**Senate, President**

ISSUE

The Special Committee on University Finance (SCUF) was created as a special committee so that it could serve as a 3-year pilot with input from the outgoing president, input from the incoming president, and a year to decide how best to codify the body. This past year was difficult for everyone because of the impact of the pandemic but it was an especially challenging year to be a new president. Despite those challenges, President Pines has made great strides in developing a vision for the financial structure of the University with the new budgeting process, the Budget Advisory Committee (BAC), the Finance Academy, and the recent hire of the Vice President for Finance and Chief Financial Officer (VPF & CFO).

The Senate leadership met recently and agreed that while there have been many positive changes put in place by the President, the circumstances and changes over the last year were clearly not status quo and as such do not warrant routine processes. The Senate leadership strongly believes that it is important for the VPF & CFO to have ample time to acclimate to his role and gain a strong foundation about the University's finances before putting him in a position to make decisions on how best to utilize SCUF. In light of these circumstances, conducting a review to decide how best to codify the body this academic year, would not be productive.

RECOMMENDATION(S)

The Bylaws of the University Senate should be amended change the date of dissolution of the body to "2022-2023" and a minor revision to extend the term of the faculty and staff members on the committee by one year.

7.1 Membership and Selection:

7.1.d Membership—Terms: Terms shall be ~~three (3)~~ **four (4)** years for faculty and staff, and one (1) year for students. Student members who wish to continue may be renewed up to two times. Terms shall begin on July 1, 2019.

7.4 Dissolution:

7.4.a The special committee shall be dissolved following the adjournment of the last regular Senate meeting of the ~~2021~~ 2022-**2023** academic year, at which time the provisions in this article will become inoperative.

Amendments to the Senate Bylaws must be approved by the Senate by a ⅔ vote in favor and require approval by the President.

COMMITTEE WORK

The Senate leadership (the Senate Chair, Chair-Elect, Past Chair, Director, and Parliamentarian met to discuss concerns related to the required review of SCUF this academic year. It considered the impact of the pandemic over the past year, the transition to a new president, the turnover of staff and restructuring of the University's financial units and processes, and the creation and appointment of a new Vice President for Finance & Chief Financial Officer. Following extensive deliberation, the Senate leadership agreed that the University would be best served if the Senate delayed its review of SCUF by one year.

The Senate leadership consulted with the Senate Parliamentarian on the appropriate procedure, the President, and the Chair of SCUF prior to making its recommendation.

ALTERNATIVES

The Senate could require that the review be conducted this upcoming academic year (2021-2022), instead of postponing by one year.

RISKS

There are no risks to the University.

FINANCIAL IMPLICATIONS

There are no known financial implications as a result of this delay.

BYLAWS

OF THE

UNIVERSITY SENATE

AT THE

UNIVERSITY OF MARYLAND

Amended on April 9, 2021

BYLAWS OF THE UNIVERSITY SENATE
University of Maryland, College Park

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BYLAWS OF THE UNIVERSITY SENATE
The University of Maryland, College Park

ARTICLE 1
AUTHORIZATION

1.1 These *Bylaws of the University Senate* (hereafter referred to as the *Bylaws)* are adopted according to Article 7 of the *University of Maryland Plan of Organization for Shared Governance* (hereafter referred to as the *Plan),* and are subject to amendment as provided for in the *Plan.*

ARTICLE 2
MEMBERSHIP

2.1 The members of the Senate are as designated in Article 3 of the *Plan* and further specified in 2.1 and 2.2 below. All elected members are subject to the conditions stated in the *Plan,* including its provisions for expulsion, recall, and impeachment (Articles 4.10, 4.11, and 5.8 of the *Plan* and Article 2.3, 2.4, and 2.5 below).

2.1.a Staff Senators

For the purpose of Senate representation, the Staff Constituency is divided into the following categories. Each category shall elect one Senator from among its ranks for each 200 staff members or major fraction thereof.

1. Exempt Staff with appointment in Colleges, Schools, and Academic Affairs
2. Exempt Staff with appointment in Divisions
3. Non-Exempt Staff with appointment in Colleges, Schools, and Academic Affairs
4. Non-Exempt Staff with appointment in Divisions

2.1.b Staff member job categories will not include the category designated for the President, vice presidents, provosts, and deans if they hold faculty rank.

2.1.c Any individual within the faculty member voting constituency cannot be included in the staff member voting constituency or nominated for election as a staff Senator. Staff candidates for the Senate must have been employed at the University of Maryland College Park for 12 months prior to standing as candidates for the Senate. Staff members may not stand for Senate elections while in the probationary period of employment.

2.1.d An ex officio member denoted in the *Plan* (Article 3.6.a.) who is not precluded from staff member categories as noted in Articles 2.1.b and 2.1.c may be elected as a voting member of the Senate by an appropriate constituency. Such ex officio members should also have been employed by the University of Maryland College Park for 12 months prior to standing as candidates for the Senate.

2.1.e As noted in the *Plan* (Article 3.3.c), the term of each staff Senator shall be three (3) years. Terms of staff members will be staggered in such a way that for each term, one-third of the total members from a job category are serving the first year of their term. Not every member of a specific staff job category shall be elected in the same year. However, if the University or these *Bylaws* redefine the staff job categories outside of a normal reapportionment, the staff Senate seats will be vacated. A subsequent election will be held to populate all staff Senate seats within the new categories with staggered terms as follows:

(1) One-third of the members in a job category who received the lowest number of votes will serve a one-year term,
(2) One-third of the members in a job category who received the second lowest number of votes will serve two-year terms,
(3) One-third of the members in a job category who received the highest number of votes will serve three year-terms.

A person serving less than a three-year term is defined as not to have served a full term and is eligible for re-election to a full term the following year.

2.2 **Single Member Constituencies**

The Senators defined in (a)-(g) below shall be voting members of the Senate. All elections held pursuant to this section shall be organized by the Office of the University Senate.

(a) Part-Time Research, Part-Time Teaching, Adjunct, and both Full-Time and Part-Time Visiting Faculty who are not members of the Faculty Constituency as defined in Section 3.2 of the Plan shall together elect one (1) Senator, for a term of one (1) year, renewable for up to three (3) years. When the Senate votes by constituencies, that Senator shall have the same voting rights as a Faculty Senator.

(b) Emeriti Faculty who are not members of the Faculty Constituency as defined in Section 3.2 of the *Plan* shall elect one (1) Senator from among their ranks for a term of one (1) year, renewable for up to three (3) years. When the Senate votes by constituencies, that Senator shall have the same voting rights as a Faculty Senator.

(c) Head Coaches who are not members of the Faculty Constituency as defined in Section 3.2 of the University Plan of Organization together shall elect one Senator from among their ranks to serve for a term of one (1) year, renewable for up to three (3) years. When the Senate votes by constituencies, that Senator shall have the same voting rights as a faculty Senator.

(d) Post-Doctoral Scholars, Post-Doctoral Associates (formerly Research Associates), Junior Lecturers, and Faculty Assistants (formerly Faculty Research Assistants) who are not members of any Senate constituency as defined in Article 3 of the *Plan* together shall elect one (1) Senator, for a term of one (1) year, renewable for up to three (3) years. When the Senate votes by constituencies, that Senator shall have the same voting rights as a Faculty Senator.

(e) The Contingent II staff shall elect one (1) Senator from among their ranks for a term of one (1) year, renewable for up to three (3) years. When the Senate votes by constituencies, that Senator shall have the same voting rights as all other staff Senators. The Contingent II staff Senator shall have been employed by the University for twelve months prior to their election.

(f) The part-time undergraduate students shall elect one (1) Senator from among their ranks for a term of one (1) year, renewable for up to three (3) years. When the Senate votes by constituencies, that Senator shall have the same voting rights as all other student Senators.

(g) The part-time graduate students shall elect one (1) Senator from among their ranks for a term of one (1) year, renewable for up to three (3) years. When the Senate votes by constituencies, that Senator shall have the same voting rights as all other student Senators.

2.3 Elected Senators shall not be absent from two (2) consecutive regularly scheduled meetings of the Senate without notifying the Office of the University Senate that they will require an excused absence (Article 4.10.a of the *Plan*). The Senator shall be counted in the total membership when a quorum is defined for a meeting unless that Senator is expelled.

2.4 If an elected Senator is no longer a member of the constituency by which they were elected, the seat may be vacated and the Senator may be replaced according to the following guidelines:

2.4.a If there was a runner-up in the election in which the Senator was elected, the runner-up shall replace that Senator immediately, provided they are still eligible.

2.4.b If there was no runner-up in the election in which the Senator was elected and the vacancy occurs in the spring semester, that Senator shall serve for the remainder of the Senate year and shall be replaced in the next election cycle for the remainder of the term.

2.4.c If there was no runner-up in the election in which the Senator was elected and the vacancy occurs prior to the spring semester, or if the Senator is unable to serve the remainder of the Senate year, the

Senate Executive Committee, in consultation with the appropriate constituency, shall appoint a replacement for that Senator.

2.5 If an elected Senator is no longer in satisfactory standing at the University, they shall be replaced immediately upon notification to and verification by the Office of the University Senate in accordance with 2.4.a or 2.4.c above.

2.6 All elections shall be completed by the Transition Meeting of the Senate.

ARTICLE 3
MEETINGS

3.1 **Regular Meetings:**

The Senate shall schedule at least four (4) regular meetings each semester. The notice, agenda, and supporting documents will normally be provided by the Office of the University Senate to the membership one week prior to each regular meeting unless otherwise approved by the Executive Committee.

3.2 **Special Meetings:**

3.2.a Special meetings of the Senate may be called in any of the following ways, with the matter(s) to be considered to be specified in the call:

(1) By the presiding officer of the Senate;

(2) By a majority vote of the Executive Committee of the Senate;

(3) By written petition of a majority of the elected members of the Senate. The petition shall be delivered to the Chair or the Executive Secretary and Director of the Senate. The Chair shall give notice of arrangements for the meeting within seventy-two (72) hours of receipt of a valid petition; or

(4) By resolution of the Senate.

3.2.b The notice of a special meeting shall include the agenda and shall be sent to the members of the Senate as far in advance of the meeting as possible. The agenda of a special meeting may specify a scheduled time of adjournment.

3.2.c The scheduling of a special meeting shall reflect the urgency of the matter(s) specified in the call, the requirement of reasonable notice, and the availability of the membership.

3.3 **Openness of Meetings and Floor Privileges:**

3.3.a Meetings of the Senate shall be open to all members of the campus community except when the meetings are being conducted in closed session.

3.3.b Representatives of the news media shall be admitted to all meetings of the Senate except when the meetings are conducted in closed session. The use of television, video, or recording equipment shall not be permitted except by express consent of the Senate.

3.3.c When a report of a committee of the Senate is being considered, members of that committee who are not members of the Senate may have a voice but not a vote in the deliberations of the Senate on that report.

3.3.d Any Senator may request the privilege of the floor for any member of the campus community to speak on the subject before the Senate. The Chair shall rule on such requests.

3.3.e By vote of the Senate, by ruling of the Chair, or by order of the Executive Committee included in the agenda of the meeting, the Senate shall go into closed session. The ruling of the Chair and the order

of the Executive Committee shall be subject to appeal, but the Chair shall determine whether such appeal shall be considered in open or closed session.

3.3.f While in closed session, the meeting shall be restricted to voting members of the Senate (Article 3 in the *Plan*), members granted a voice but not a vote *(*Articles 3.6, 5.2.c, and 5.5.c. of the *Plan*), the Executive Secretary and Director, the Parliamentarian, the immediate Past Chair of the Senate, any staff required for meeting operations, and other persons expressly invited by the Senate Chair.

3.4 **Rules for Procedure:**

3.4.a The version of *Robert's Rules of Order* that shall govern the conduct of Senate meetings shall be *Robert's Rules of Order, Newly Revised*.

3.4.b A quorum for meetings shall be defined as a majority of elected Senators who have not submitted an excused absence to the Office of the University Senate, or sixty (60) Senators, whichever number is higher. For the purpose of determining a quorum, ex officio members without vote shall not be considered.

3.4.c Voting shall be restricted to eligible members of the Senate (Article 3 in the *Plan*) who are participating in the Senate meeting at the time of the vote.

ARTICLE 4
EXECUTIVE COMMITTEE

4.1 **Membership and Election:**

4.1.a As set forth in the *Plan* (Article 8.2), the members of the Executive Committee shall include the Chair and Chair-Elect of the Senate, thirteen (13) members elected from the voting membership of the Senate, and five (5) non-voting ex officio members.

4.1.b The election of the Executive Committee should follow the election of the Chair-Elect as provided for in the *Plan* (Article 5.3 and 5.7.a). In the event of a tie vote in the election for members of the Executive Committee, a ballot will be made available to each Senator in the appropriate constituency as soon as the votes are counted and the tie discovered. The election to break the tie should end one (1) week from the start date.

4.1.c In the event of a vacancy on the Executive Committee, the available candidate who had received the next highest number of votes in the annual election for the Executive Committee shall fill the remainder of the unexpired term.

4.2 **Charge: The Executive Committee shall exercise the following functions:**

4.2.a Assist in carrying into effect the actions of the Senate;

4.2.b Act for the Senate as provided for by and subject to the limitations stated in Article 4.3;

4.2.c Act as an initiating body suggesting possible action by the Senate;

4.2.d Assist in the administrative implementation of policies adopted by the Senate, as needed;

4.2.e Prepare the agenda for each Senate meeting as provided for by and subject to limitations stated in Article 4.4;

4.2.f Serve as a channel through which any member of the campus community may introduce matters for consideration by the Senate or its committees;

4.2.g Ensure that information on the Senate's work each year is available to the campus community through the Senate website and reported to the President;

4.2.h Provide feedback on the operations of the Office of the University Senate, and make recommendations to the President or his or her designee for improvements in those operations and for suitable candidates for the role of the Executive Secretary and Director;

4.2.i Serve as the channel through which the Senate and the campus community may participate in the selection of administrators at the University;

4.2.j Perform such other functions as may be given it in other provisions of these *Bylaws* and the *Plan;* and

4.2.k Make recommendations on nominees for campus-wide and system-wide committees and councils requiring representatives, when necessary.

4.3 **Rules Governing Executive Committee Action for the Senate:**

4.3.a Where time or the availability of the membership precludes a meeting of the Senate, as, for example, during the summer or between semesters, the Executive Committee may act on behalf of the Senate.

4.3.b A report of all actions taken by the Executive Committee when acting on behalf of the Senate, with supporting material, shall be included with the agenda of the next regular meeting of the Senate. By written request of ten (10) Senators, received by the Chair of the Senate prior to the call to order of that meeting, any Executive Committee action on behalf of the Senate shall be vacated and the item in question placed on the agenda for that meeting. If any such item is not petitioned to the floor, it shall stand as an approved action of the Senate.

4.4 **Rules Governing Preparation of the Senate Agenda:**

4.4.a The order of business for regular meetings of the Senate shall be set by the Executive Committee. Typically, the order of the agenda will follow *Robert's Rules of Order*, but the Executive Committee maintains authority to reorder the agenda based on the needs of the Senate.

4.4.b For regular meetings the Executive Committee shall consider all submissions for inclusion on the Senate agenda. The Executive Committee may not alter a submission, but may delay its inclusion, may include it on the agenda of a special meeting, may submit the material directly to a committee of the Senate, or may refuse to place it on the agenda if the material is inappropriate, incomplete, or unclear. The party making a submission shall be notified of the action taken in this regard by the Executive Committee.

4.4.c The order of business for a special meeting of the Senate shall be set by the Executive Committee.

4.4.d For a special meeting the agenda shall include the matter(s) specified in the call of that meeting as the Special Order. Other items may be included on the agenda as the Executive Committee deems appropriate.

4.5 **Meetings of the Executive Committee**: A quorum of the Executive Committee shall be eight (8) voting members. Minutes of the meetings shall be kept. The agenda shall be made publicly available prior to each meeting. The Executive Committee shall meet at the call of the Chair or by petition of eight (8) voting members of the Executive Committee, or by petition of twenty-five (25) voting members of the Senate.

4.6 **The Senate Budget**: The Executive Secretary and Director shall be responsible for the Senate budget, shall consult with the Senate Chair on the preparation of the budget request, and shall report to the Executive Committee on the status of the budget.

4.6.a The Executive Secretary and Director shall make an annual report to the Associate Vice President for Personnel and Budget on expenditure of the Senate budget.

4.6.b Consent of the Associate Vice President for Personnel and Budget shall be required before any change in the budgeted use of Senate funds involving more than ten percent (10%) of the total may be undertaken.

4.7 **Referral of Items to Standing Committees:** The Executive Committee shall refer items to the standing committees.

4.7.a The Executive Committee shall refer an item to an appropriate committee when instructed by the Senate or when requested by the President, or when petitioned by 150 members of the Senate electorate.

4.7.b The Executive Committee may also refer any item it deems appropriate, and the standing committee shall give due consideration to such requests from the Executive Committee.

4.7.c The Chair of the Senate may, as need requires, act for the Executive Committee and refer items to standing committees. All such actions shall be reported at the next meeting of the Executive Committee.

4.8 To the extent permitted by law and University policy, the records of the Senate shall be open.

ARTICLE 5
COMMITTEES OF THE SENATE

5.1 **Standing Committees - Specifications:** The specifications of each standing committee of the Senate shall state its name, its specific charge, and any exceptions or additions to the basic charge to standing committees stated in Article 5.2. The specifications shall list all voting ex officio members and shall define committee composition.

5.1.a Standing Committees: In an appropriate section of Article 6 there shall be specifications for each committee.

5.2 **Standing Committees - Basic Charge:** In its area of responsibility, as defined in its specifications, each committee shall be an arm of the Senate with the following powers:

(1) To formulate and review policies to be established by the Senate according to the *Plan* (Article 1);

(2) To review established policies and their administration and to recommend any changes in policies or their administration that may be desirable;

(3) To serve in an advisory capacity, upon request, regarding the administration of policies;

(4) To function on request of the President or of the Executive Committee as a board of appeal with reference to actions and/or decisions made in the application of policies; and

(5) To recommend the creation of special subcommittees (Article 5.7-5.9) when deemed necessary.

5.3 **Standing Committees - Committee Operation:**

5.3.a Agenda Determination:

(1) Issues within the committee's purview shall be referred and charged to the committee by the Executive Committee (Article 4.7). Such matters should take priority on the committee's agenda.

(2) A committee shall have principal responsibility for identifying matters of present and potential concern to the campus community within its area of responsibility. Such matters should be placed on the agenda of the committee.

(3) Committee agendas shall be made publicly available prior to each meeting.

5.3.b Minutes of the proceedings of each committee meeting shall be kept.

5.3.c Rules for Procedure of Standing Committees: Standing Committees are typically governed by *Robert's Rules of Order for Small Committees, Newly Revised.* Standing Committees shall determine how technology, such as video conferencing and other electronic methods of participation, can be used for their purposes. Standing Committees may choose to conduct votes online or via email, and shall agree on any other mechanisms for conducting business outside of meetings, when necessary.

5.3.d Quorum Requirements of Standing Committees: Unless a quorum number is specified in the membership description of a committee, the quorum shall be a majority of voting members of the committee.

5.4 **Standing Committees - Reporting Responsibilities:** Each committee shall be responsible through its presiding officer for the timely delivery of the following reports.

5.4.a Information on the schedule of committee meetings stating the date, time, and location should be made available on the Senate. The agenda for each meeting shall be made available on the Senate website as far in advance of the meeting as possible.

5.4.b The committee shall report its progress on agenda items as required by the Executive Secretary and Director or the Chair of the Senate.

5.4.c Reports providing information and/or recommendations to the Senate shall be submitted to the Executive Committee for inclusion on the Senate agenda. Reports resulting from the committee's advisory or board of appeals function shall be submitted to the appropriate Senate or campus officer, and the Executive Committee notified of the submission.

5.4.d Upon written request of at least four (4) members of a committee, the presiding officer of that committee shall include a minority statement with any committee report. Those requesting inclusion need not support the substance of the minority statement.

5.4.e An annual report shall be presented to the Chair of the Senate at the end of the academic year, or, if approved by the Chair, no later than August 16, for submission to the Executive Committee. The report shall include a list of all items placed on the committee's agenda, noting the disposition of each and a summary of the committee's deliberations. An overview of the committee's past work shall be made available on the Senate website. In the case of committees with little activity, the committee may recommend inactive status the ensuing year until charged by the Executive Committee to address a specific matter:

(1) A committee may be placed on inactive status with approval of the Executive Committee. No presiding officer or members shall be appointed to the committee while on inactive status.

(2) A committee on inactive status may be reactivated by the Executive Committee when matters within its purview, as stipulated in Article 6, are brought to the Executive Committee for review. Following reactivation, the Office of the University Senate shall solicit volunteers for the committee in its annual volunteer period, and the Committee on Committees shall select members for the committee, in accordance with the provisions of 5.5 below.

(3) A Special Committee (Article 5.9) may not be appointed to consider matters within standing committee specifications in lieu of reactivating an inactive committee.

5.5 **Standing Committees - Selecting Members:** Persons shall be named to standing committees in accordance with the procedures listed below.

5.5.a The Office of the University Senate shall provide information on the charge and membership specifications of each committee.

5.5.b The Office of the University Senate shall solicit volunteers for the Senate's standing committees on an annual basis through an online process. During this volunteer period, all faculty, staff, and students shall be eligible to indicate their top three preferences for any committees with vacancies in their

constituency and include a candidacy statement for consideration by the Committee on Committees. The Office of the University Senate will maintain these records for potential future use.

5.5.c The Committee on Committees shall develop slates of nominees to fill vacancies on the standing committees and University Councils. No person shall be nominated for a committee position without consenting to serve on that committee, either through indicated preference or explicit agreement. In making nominations, the Committee on Committees shall keep in view the continuing membership of the committee to ensure that the full membership complies with specifications of the *Plan* and these *Bylaws.* Committee members shall be nominated consistent with requirements for diversity specified in Section 8.1 of the *Plan.*

5.5.d Ex officio members named in a committee's specifications shall be voting members unless otherwise specified in the *Bylaws.* Upon recommendation of the Committee on Committees, the Executive Committee may appoint ex officio members with particular expertise or benefit to the committee. Such members shall serve with voice, but without vote. The Executive Committee is empowered to make such changes in non-voting ex officio membership as appropriate.

5.5.e The Committee on Committees shall forward a slate of nominees for committee service to the Executive Committee to place on the Senate agenda for approval. Each nominee shall be identified by name and constituency. The notice of nomination shall also include the name and constituency of continuing members of the committee, and the name and office of the ex officio members, listed for information only. The nominations shall be subject to action by the Senate consistent with the *Plan* and the specifications of these *Bylaws.*

5.5.f Terms on standing committees shall be two (2) years for faculty and staff, and one (1) year for students. Appointments to two-year terms shall be staggered: that is, as far as practical, half of the terms from each faculty or staff constituency shall expire each year. Terms shall begin on July 1 of the appropriate year.

5.5.g A member of a standing committee whose term is expiring may be appointed to another term, subject to restrictions (1) and (2) below. The Committee on Committees is particularly charged to consider the reappointment of active student members.

(1) No reappointment shall be made that would cause the appointee to serve longer than four consecutive years on the same committee.

(2) At most, half of the non-student members of a committee whose terms are expiring in any given year may be reappointed.

5.5.h Terms as presiding officer of a committee shall be one year. A presiding officer may be reappointed if his/her tenure as a Senator is continuing; however, no one shall serve as presiding officer of a committee for longer than two (2) consecutive years.

5.5.i Appointments of the presiding officers of committees shall be made by the Chair of the Senate, designated on the annual committee slate, and shall be approved by the Senate.

5.6 **Standing Committees - Replacing Presiding Officers and Members:** The presiding officer and members of any active standing committee may be replaced for cause after inquiry by the Office of the University Senate with approval of the Executive Committee.

5.6.a Cause, for presiding officers, is defined as the following:

(1) Failure to activate the committee during the first semester after appointment in order to organize its business and determine an agenda; or

(2) Failure to activate the committee in order to respond to communications referred from the Executive Committee; or

(3) Failure to activate the committee in order to carry out specific charges required in Article 6 or other Senate documents; or

(4) Continual absence from scheduled committee meetings.

5.6.b Cause, for members, is defined as the following:

(1) Continual absence from committee meetings and/or lack of participation in committee activities; or

(2) Lack of registration on campus for students or termination of employment on campus for faculty and staff.

5.6.c Procedure for replacing presiding officers and members:

(1) The decision to replace a presiding officer rests with the Senate Chair; and

(2) The presiding officer of a committee shall submit the request to replace a committee member to the Chair of the Committee on Committees.

5.6.d The Senate Chair and the Chair of the Committee on Committees shall consult with the Office of the University Senate to identify a replacement when a decision is made to replace a presiding officer or a committee member.

5.7 **Standing Committees - Appointing Special Subcommittees:** A standing committee of the Senate may appoint special subcommittees to assist in the effective performance of its responsibilities. Persons appointed to special subcommittees who are not members of standing committees must be approved by the Executive Committee. The Chair of any special subcommittee must be a member of the standing committee making the appointment.

5.8 **Standing Committees - Appointing Special Joint Subcommittees:** Two or more standing committees of the Senate may appoint special joint subcommittees to assist in the effective review of issues that pertain to the charge of multiple committees. Persons appointed to serve who are not members of associated standing committees must be approved by the Executive Committee. The Chair of any such subcommittee must be a member of one of the associated standing committees making the appointment. Special Joint Subcommittees will report directly to the full associated standing committees for final action.

5.9 **Special Committees:** A special committee of the Senate may be established by resolution of the Senate to carry out a specified task. The empowering resolution shall also stipulate the means of selecting the committee and any restrictions on its composition. The committee shall function until the completion of its tasks or until discharged by the Senate. A final report of its work shall be presented to the Senate. Members shall serve for the duration of the committee unless otherwise specified by the Senate.

ARTICLE 6
STANDING COMMITTEE SPECIFICATIONS

6.1 Academic Procedures and Standards Committee:

6.1.a Membership: The committee shall consist of an appointed presiding officer; ten (10) faculty members; one (1) staff member; three (3) undergraduate and one (1) graduate student; and the following persons or a representative of each: the Senior Vice President and Provost, the Director of Undergraduate Admissions, the University Registrar, the Associate Provost for Academic Affairs and Dean for Undergraduate Studies, and the Associate Provost for Academic Affairs and Dean of the Graduate School.

6.1.b Quorum: A quorum of the Academic Procedures and Standards Committee shall be ten (10) voting members.

6.1.c Charge: The committee shall formulate and continually review policies, rules, and regulations governing the admission, readmission, academic standing, and dismissal of all students for academic deficiency.

6.1.d Charge: The committee shall formulate and continually review policies and procedures for academic advisement, scheduling of classes, and registration.

6.1.e Charge: The committee shall formulate and continually review policies to be observed by the instructional staff in conducting classes, seminars, examinations, students' research, and student evaluations.

6.1.f Policies, rules, and regulations exclusively governing admission, readmission, scholastic standing, and dismissal of graduate students for academic deficiency shall be reviewed by an appropriate committee of the Graduate School. Such policies, rules, and regulations will be transmitted by the Graduate School directly to the Senate through the Executive Committee. Policies, rules, and regulations that concern both graduate and undergraduate matters shall be considered by both the Academic Procedures & Standards (APAS) Committee and the appropriate committee of the Graduate School.

6.2 Campus Affairs Committee:

6.2.a Membership:

(1) The committee shall consist of an appointed presiding officer; six (6) faculty members; two (2) undergraduate and two (2) graduate students; two (2) staff members, with one exempt and one non-exempt to the extent of availability; the President or a representative of the Student Government Association; the President or a representative of the Graduate Student Government; and the following persons or a representative of each: the Senior Vice President and Provost, the Vice President and Chief Administrative Officer, the Vice President for Student Affairs, the Vice President for Marketing and Communications, the Vice President for Diversity & Inclusion, and the Chair of the Coaches Council.

(2) When discussions of safety are on the agenda, the Chief of Police, the Office of General Counsel, the Director of Transportation Services, and other campus constituencies, as appropriate, shall be invited to participate or send a representative.

(3) The Chair of this committee or a faculty member designated by the Chair and approved by the Senate Executive Committee will serve as an ex officio member of the Athletic Council. The Chair, or a committee member designated by the Chair, shall also serve as an ex-officio member of the Campus Transportation Advisory Committee.

6.2.b Quorum: A quorum of the Campus Affairs Committee shall be nine (9) voting members.

6.2.c Charge: The committee shall formulate and continually review policies and regulations affecting the entire campus, its functions, its facilities, its internal operation and its external relationships, including the awarding of campus prizes and honors, and make recommendations concerning the future of the campus.

6.2.d Charge: The committee shall formulate and continually review policies and procedures for the periodic review of campus level administrators.

6.2.e Charge: The committee shall periodically gather community input on safety and security issues and shall act as a liaison between the police and the campus community.

6.3 Committee on Committees:

6.3.a Membership and terms:

(1) As set forth in the *Plan* (Article 8.3.a), the Committee on Committees shall be chaired by the Chair-Elect of the Senate.

(2) The voting membership, as defined in the *Plan* (Article 8.3.a), shall consist of the Chair-Elect of the Senate, six (6) faculty members elected by faculty Senators, with no more than one (1) from any College or School; one (1) non-exempt staff member elected by non-exempt staff Senators; one (1) exempt staff member elected by exempt staff Senators; one (1) undergraduate student elected by undergraduate student Senators; and one (1) graduate student elected by graduate student Senators.

(3) Students are elected to serve for one (1) year, faculty and staff for two (2) years, whether or not their membership in the Senate continues beyond their first year of service in the committee.

(4) Terms of faculty and staff members are staggered in such a way that, at any time, no more than three (3) faculty members and one (1) staff member are serving the second year of their term.

(5) In the event of a vacancy on the Committee on Committees, the available candidate who had received the next highest number of votes in the last annual election for the Committee on Committees shall fill the remainder of the unexpired term. In the event that there is no runner-up, the Executive Committee shall fill the vacant seat.

(6) A quorum of the Committee on Committees shall be six (6) voting members.

6.3.b Charge:

(1) As set forth in the *Plan* (Article 8.3.b), responsibilities of the Committee on Committees include:

(a) Identification and recruitment of individuals for service on Senate committees;

(b) Approval of the University Library Council slate of nominees, as mandated in section 2.C of the Bylaws of the University Library Council.

(c) Creation of a slate of nominees for the Nominations Committee, for approval by the Senate.

(2) Additional duties include:

(a) As needed, the Committee on Committees may be charged to assess effectiveness of committees, and make recommendations for improvements and changes in their operations and structure.

(b) Other such duties as specified by the Executive Committee.

6.3.c Operation: The Committee on Committees shall follow the procedures specified for standing committees in Article 5 above, with the exceptions of 5.3.b and 5.5.

6.4 Educational Affairs Committee:

6.4.a Membership: The committee shall consist of an appointed presiding officer; ten (10) faculty members, of whom at least two (2) must be tenured/tenure-track faculty members and at least two (2) must be professional track faculty members; two (2) staff members, with one exempt and one non-exempt to the extent of availability; two (2) undergraduate students and one (1) graduate student; the President or a representative of the Student Government Association; the President or a representative of the Graduate Student Government; the Associate Dean for General Education; a representative of the Associate Provost for Academic Affairs and Dean for Undergraduate Studies; and the following persons or a representative of each: the Senior Vice President and Provost, the Associate Provost for Academic Affairs and Dean of the Graduate School, and the Vice President of Information Technology and Chief Information Officer (CIO).

6.4.b Quorum: A quorum of the Educational Affairs Committee shall be eleven (11) voting members.

6.4.c Charge: The committee shall formulate and continually review plans and policies to strengthen the

educational system of the College Park campus. The committee shall receive ideas, recommendations, and plans for educational innovations from members of the campus community and others. The committee shall inform itself of conditions in the Colleges, Schools, and other academic units, and shall propose measures to make effective use of the resources of the campus for educational purposes.

6.4.d Charge: The committee shall exercise broad oversight and supervision of the General Education Program at the University of Maryland as described in the 2010 document Transforming General Education at the University of Maryland and the General Education Implementation Plan approved by the University Senate in February 2011. The committee shall review and make recommendations concerning the General Education Program to the Senate and the Associate Provost for Academic Affairs and Dean for Undergraduate Studies. Such recommendations shall include, as the committee deems appropriate, the program's requirements and its vision, especially with regard to evaluating trends, reviewing learning outcomes, and maintaining the balance of courses in the General Education categories.

6.4.e Relation of the Educational Affairs Committee to the General Education Program and the Office of the Associate Provost for Academic Affairs and Dean for Undergraduate Studies:

(1) The Associate Provost for Academic Affairs and Dean for Undergraduate Studies will prepare an annual report on the status of the General Education Program and will send the report to the Educational Affairs Committee by October 1.

(2) The Associate Provost for Academic Affairs and Dean for Undergraduate Studies will meet with the Educational Affairs Committee as needed to discuss or update the report. Topics will include but not be limited to: the membership and ongoing work of the General Education Faculty Boards; the proposal and approval process for General Education courses; the learning outcomes for the different course categories; areas where additional courses or rebalancing may be needed; trends and developments that may impact the General Education Program; and informational resources for students, faculty, and advisors about the General Education Program.

(3) The Office of the Associate Provost for Academic Affairs and Dean for Undergraduate Studies shall inform the committee of modifications in the proposal or review process, the disposition of recommendations from the committee, and any other changes regarding the implementation of the General Education Program as specifically delegated to that office.

6.5 Elections, Representation, and Governance Committee:

6.5.a Membership: The committee shall consist of an appointed presiding officer; six (6) faculty members; one (1) exempt staff member; one (1) non-exempt staff member; two (2) undergraduate and two (2) graduate students; and representatives of the Director of Human Resources and the Associate Vice President for Institutional Research, Planning, and Assessment.

6.5.b Quorum: A quorum of the Elections, Representation, and Governance Committee shall be eight (8) voting members.

6.5.c Charge: The committee shall review and recommend policies regarding the conduct of elections, determine correct apportionments for all constituencies, and investigate and adjudicate all charges arising from the management and results of Senate elections.

6.5.d Charge: The committee shall determine the correct apportionment for all constituencies every five (5) years as stipulated in Article 3.8 of the Plan and following any review or revision of the *Plan* as stipulated in Article 6.3 of the *Plan*.

6.5.e Charge: The committee shall supervise all Senatorial elections and referenda in accordance with the *Plan* (Article 4.2), and shall consult with certain constituencies in their nomination and election processes in accordance with the *Plan* (Article 4) as requested by the Executive Committee.

6.5.f Charge: The committee shall formulate and review procedures for the tallying and reporting of election results and shall perform other such duties as appropriate (Article 3.3.b of the *Plan*).

6.5.g Charge: The committee shall review the Plans of Organization of the Colleges, Schools, and other units, in accordance with the *Plan* (Article 11) and as specified in Appendix 7 of these Bylaws.

6.5.h Charge: The committee shall review and observe the operation and effectiveness of the University Senate and make any appropriate recommendations for improvements.

6.5.i Charge: The committee shall receive all petitions for impeachment of the Chair or Chair-Elect in accordance with the *Plan* (Article 5.8).

6.5.j Charge: The committee shall initiate procedures for expelling Senators in accordance with the *Plan* (Article 4.10).

6.5.k Charge: The committee shall receive all petitions for the recall of Senators in accordance with the *Plan* (Article 4.11).

6.6 Equity, Diversity, & Inclusion Committee:

6.6.a Membership: The committee shall consist of an appointed presiding officer; five (5) faculty members; three (3) exempt staff members; two (2) non-exempt staff members; two (2) undergraduate and two (2) graduate students; and the following persons or a representative of each: the Senior Vice President and Provost, the Vice President for Diversity & Inclusion, the Vice President and Chief Administrative Officer, the Vice President for Student Affairs, and the Director of the Office of Civil Rights and Sexual Misconduct.

6.6.b Quorum: A quorum of the Equity, Diversity, & Inclusion Committee shall be ten (10) voting members.

6.6.c Charge: The committee shall actively promote an equitable, diverse, and inclusive campus that is free from all forms of discrimination by formulating and continually reviewing policies and procedures pertaining to issues of equity, diversity, and inclusion. These include but are not limited to the University of Maryland Non-Discrimination Policy and Procedures and the University of Maryland Disability & Accessibility Policy and Procedures.

6.6.d Charge: The committee shall consider programs and activities for improving equity, diversity, and inclusiveness on campus, and shall make recommendations to appropriate campus bodies.

6.7 Faculty Affairs Committee:

6.7.a Membership: The committee shall consist of an appointed presiding officer; ten (10) faculty members, of whom four (4) shall be Senators including one (1) assistant professor and one (1) professional track faculty member; one (1) undergraduate student and two (2) graduate students; one (1) staff member; and the following persons or a representative of each: the President, the Senior Vice President and Provost, and the Director of Human Resources. One (1) elected Council of University System Faculty representative from the University shall serve as a voting ex officio member. The Faculty Ombuds Officer shall serve as a non-voting ex officio member.

6.7.b Quorum: A quorum of the Faculty Affairs Committee shall be nine (9) voting members.

6.7.c Charge: The committee shall formulate and continually review policies pertaining to faculty life, employment, academic freedom, morale, and perquisites.

6.7.d Charge: The committee shall work for the advancement of academic freedom and the protection of faculty and research interests.

6.7.e Charge: The committee shall, in consultation with Colleges, Schools, and other academic units,

formulate and review procedures for the periodic review of academic administrators below the campus level.

6.7.f Charge: The committee shall review the Appointment, Promotion, and Tenure or Permanent Status section of each College, School, or the Library Plan of Organization in accordance with Appendix 7 of these *Bylaws*. In conjunction with this review, the committee shall also review the professional track faculty Appointment, Evaluation, and Promotion Policy of each College, School, or the Library.

6.8 Programs, Curricula, and Courses Committee:

6.8.a Membership: The committee shall consist of an appointed presiding officer; ten (10) faculty members; one (1) staff member; two (2) undergraduate students and one (1) graduate student; and the following persons or a representative of each: the Senior Vice President and Provost, the Associate Provost for Academic Affairs and Dean for Undergraduate Studies, the Associate Provost for Academic Affairs and Dean of the Graduate School, and the Dean of Libraries.

6.8.b Quorum: A quorum of the Programs, Curricula, and Courses Committee shall be nine (9) voting members.

6.8.c Charge: The committee shall formulate, review, and make recommendations to the Senate concerning policies related both (1) to the establishment, modification, or discontinuance of academic programs, curricula, and courses; and (2) to the establishment, reorganization, or abolition of colleges, schools, academic departments, or other units that offer credit-bearing programs of instruction or regularly offer courses for credit.

6.8.d Charge: The committee shall review and make recommendations to the Senate in at least the areas designated by (1) through (3) below. Recommendations in these areas are not subject to amendment on the Senate floor unless a detailed objection describing the area of concern has been filed with the Office of the University Senate at least forty-eight (48) hours prior to the meeting at which the recommendations will be introduced. The committee will announce proposed recommendations to the campus community sufficiently in advance of the meeting at which they are to be considered so as to allow time for concerned parties to file their objections.

(1) All proposals for the establishment of a new academic program, for the discontinuance of an existing academic program, for the merger or splitting of existing academic programs, or for the renaming of an existing academic program;

(2) All proposals for the creation, abolition, merger, splitting, or change of name of Colleges, Schools, departments of instruction, or other units that offer credit-bearing programs of instruction or regularly offer courses for credit; and

(3) All proposals to reassign existing units or programs to other units or programs.

6.8.e Charge: The committee shall review and shall directly advise the Office of Academic Planning and Programs concerning proposals to modify the curricula of existing academic programs, or to establish citation programs consistent with College rules approved by the Senate. The committee shall inform the Senate of its actions in these cases.

6.8.f Charge: The committee shall review, establish, and advise the Vice President's Advisory Committee concerning policies for adding, deleting, or modifying academic courses.

6.8.g Charge: The committee shall be especially concerned with the thoroughness and soundness of all proposals, and shall evaluate each according to the mission of the University, the justification for the proposed action, the availability of resources, the appropriateness of the sponsoring group, and the proposal's conformity with existing regulations. The committee shall be informed of any recommendations made by the Academic Planning Advisory Committee concerning resource issues, the consistency of the proposed action with the University's mission and strategic directions, or both.

6.8.h Operation: The committee shall follow the procedures specified for standing committees in Article 5 above, with the exception of 5.3.b.

6.8.i Relation of the Programs, Curricula, and Courses Committee to the Office of the Senior Vice President and Provost.

(1) The committee, in consultation with the Office of the Senior Vice President and Provost, shall determine the requirements for supporting documentation and the procedures for review for all proposals.

(2) The committee shall be informed by the Office of the Senior Vice President and Provost of all proposed modifications to existing programs and curricula. After consulting with the presiding officer of the committee, the Office of the Senior Vice President and Provost shall act on all minor changes that are not of a policy nature.

(3) The committee shall be informed by the Office of the Senior Vice President and Provost of all changes made pursuant to 6.8.i(2). The committee shall be informed by the Office of the Senior Vice President and Provost of all other changes in academic curricula whose approval has been specifically delegated to that office. In particular, this includes the approval to offer existing academic programs through distance education or at a new off-campus location.

6.8.j Relationship of the Programs, Curricula, and Courses Committee to the Graduate School: Proposals concerned with graduate programs and curricula shall receive the review specified by the Graduate School, in addition to the review of the Programs, Curricula, and Courses Committee. Any such proposal whose approval has been denied by the Graduate School shall not be considered by the committee.

6.9 Staff Affairs Committee:

6.9.a Membership: The committee shall consist of an appointed presiding officer; eight (8) staff members, with two (2) members from each of the elected staff categories; two (2) Category II contingent employees, with one exempt and one non-exempt to the extent of availability; one (1) faculty member; one (1) student; and one (1) representative each of the Senior Vice President and Provost, the Director of Human Resources, the Vice President and Chief Administrative Officer and the Vice President for Student Affairs. The three (3) elected University representatives to the Council of University System Staff (CUSS) shall serve as voting ex officio members; the alternate University representatives to the Council of University System Staff (CUSS) shall be non-voting ex officio members.

6.9.b Quorum: A quorum of the Staff Affairs Committee shall be nine (9) voting members.

6.9.c Charge: The committee shall formulate and continually review campus policies affecting staff members, including policies regarding periodic review of campus departments and administrators that employ staff members.

6.9.d Charge: The committee shall assist the Office of the University Senate in soliciting nominations and encouraging participation in elections of staff Senators as specified in Article 4.5 of the *Plan*.

6.9.e Charge: Staff Affairs shall assist the Committee on Committees and the Senate Executive Committee in identifying and recruiting staff representatives for campus and Senate committees, including system-wide activities involving staff.

6.9.f Charge: The committee shall administer the Council of University System Staff (CUSS) nomination and election process. Definitions of eligible staff shall be defined by the Board of Regents and CUSS.

6.9.g Charge: The committee shall actively promote and provide orientation and opportunities for staff involvement in shared governance at every administrative level.

6.9.h Charge: The committee shall facilitate the annual nomination process for the Board of Regents' Staff

Awards at the University of Maryland, College Park.

6.10 Student Affairs Committee:

6.10.a Membership: The committee shall consist of an appointed presiding officer; eight (8) undergraduate students, of whom four (4) must be Senators; four (4) graduate students, of whom two (2) must be Senators; two (2) faculty members; two (2) staff members with one exempt and one non-exempt to the extent of availability; the President or a representative of the Student Government Association; the President or a representative of the Graduate Student Government; two (2) representatives of the Office of the Vice President for Student Affairs; and one (1) representative each from the Graduate School, and the Department of Resident Life.

6.10.b Quorum: A quorum of the Student Affairs Committee shall be ten (10) voting members.

6.10.c Charge: The committee shall formulate and continually review policies regarding all non-academic matters of student life including, but not limited to, student organizations, resident life, extracurricular activities, and student concerns in the campus community.

6.10.d Charge: The committee shall support the work of other Senate committees by assessing and communicating the student perspective on a range of issues affecting students, including matters outside the purview described in 6.10.c.

6.10.e Charge: The committee shall assist the Office of the University Senate and the Colleges and Schools as appropriate in soliciting nominations and encouraging participation in the election of student Senators.

6.11 Student Conduct Committee:

6.11.a Membership: The committee shall consist of an appointed presiding officer; four (4) faculty members; one (1) staff member; five (5) students, of whom at least three (3) must be undergraduate students and one (1) must be a graduate student; and the Director of the Office of Student Conduct, or a representative, as a non-voting ex officio member.

6.11.b Charge: The committee shall formulate and continually review recommendations concerning the rules and codes of student conduct, as well as means of enforcing those rules and codes.

6.11.c Charge: The committee acts as an appellate body for infractions of the approved Code of Student Conduct and Code of Academic Integrity. Procedures for the committee's operation in this role are to be developed and filed with the Office of Student Conduct and the Executive Secretary and Director of the Senate. The committee shall also confirm members of all judicial boards listed in the Code of Student Conduct, except conference and ad hoc boards.

ARTICLE 7
SPECIAL COMMITTEE ON UNIVERSITY FINANCE

7.1 Membership and Selection:

7.1.a Composition: The special committee shall consist of a presiding officer appointed by the Senate Chair from among the tenured faculty; five (5) tenured or tenure-track faculty members; one (1) professional track faculty member; one (1) exempt staff member; one (1) non-exempt staff member; two (2) undergraduate students; one (1) graduate student; the immediate Past Chair of the Senate; the Vice President for Finance and Chief Financial Officer; the Associate Vice President for Finance and Personnel, Academic Affairs; and the following persons or a representative of each: the President, and the Vice President for Student Affairs. The Senior Vice President and Provost shall also appoint a representative chosen from among current and former unit-level budget officers or former department chairs. All members of the special committee shall be voting members.

7.1.b Selection of Members: The regular membership of the special committee shall be selected by the elected members of the Senate Executive Committee. Following the May 7, 2019, Transition Meeting,

current Senators may nominate any member of the campus community. Nominees shall provide a statement indicating their interest in and qualifications for the special committee. Members of the Senate Executive Committee may not be nominated. Elected members of the Senate Executive Committee will vote by constituencies for members of the special committee. In the event of a tie, the Senate Chair will cast the deciding vote.

7.1.c Membership—Vacancies: After each Transition Meeting of the Senate, current Senators may nominate members of the campus community for any vacant seats. In the event of a vacancy during the academic year, members of the Senate Executive Committee from the respective constituency will select a replacement from the most recent list of nominees. If there are no interested nominees, a new nomination period will be opened and members of the Senate may submit nominations following the procedures in 7.1.b.

7.1.d Membership—Terms: Terms shall be ~~three (3)~~ **four (4)** years for faculty and staff, and one (1) year for students. Student members who wish to continue may be renewed up to two times. Terms shall begin on July 1, 2019.

7.2 Charge: The special committee shall exercise the following functions:

7.2.a Develop a deep understanding of the University's budget and budgeting processes and use that knowledge to educate the campus community on these practices.

7.2.b Consult with and advise the President, the Senior Vice President and Provost, and other University administrators on short- and long-term institutional priorities, particularly as they relate to the University's mission and Strategic Plan.

7.2.c Advise Senate-related bodies—including committees, councils, and task forces—on the fiscal implications of any proposed recommendations under consideration.

7.2.d Report to the Senate two times each year on the budgetary and fiscal condition of the University and the administration's response to any special committee recommendations.

7.2.e Regularly report on its activities and the budgetary and fiscal condition of the University to the Senate Executive Committee.

7.3 Operations:

7.3.a Agenda Determination: The special committee shall have principal responsibility for identifying matters of present and potential concern to the campus community within its area of responsibility. The presiding officer shall place such matters on the agenda of the committee. Agendas shall be made publicly available prior to each meeting.

7.3.b Meetings: The special committee shall meet as frequently as is needed to accomplish its charge, but at least monthly throughout the academic year. Additional meetings may be required over the summer months to accommodate the University's budgeting processes. Given the sensitive nature of the special committee's work, meetings will be closed to all but members and invited guests.

7.3.c Minutes: Minutes of the special committee's proceedings shall be kept.

7.3.d Procedure: The version of *Robert's Rules of Order* that shall govern the special committee shall be *Robert's Rules of Order for Small Committees, Newly Revised*. The special committee shall determine how technology, such as phone and video conferencing and other electronic methods of participation, can be used for its purposes. The special committee may choose to conduct votes via email, and shall agree on any other mechanisms for conducting business outside of meetings, when necessary.

7.3.e Quorum: Quorum shall be a majority of the members of the special committee.

7.3.f Guests: The special committee may invite guests to participate in its meetings if it is deemed necessary.

7.4 Dissolution:

7.4.a The special committee shall be dissolved following the adjournment of the last regular Senate meeting of the ~~2021-~~2022-**2023** academic year, at which time the provisions in this article will become inoperative.

ARTICLE 8
UNIVERSITY COUNCILS

8.1 **Definition:** University Councils are established by Article 8.6 of the *Plan* to exercise an integrated advisory role over specified campus units and their associated activities. University Councils are jointly sponsored by the University Senate and the Office of the President or Provost (as appropriate). University Councils may be assigned reporting responsibilities to any member(s) of the College Park administration at the dean level or above (hereafter referred to as the "designated administrative officer").

8.2 **Creation of University Councils:** Proposals to create a University Council shall be evaluated by a task force appointed jointly by the Senate Executive Committee and the designated administrative officer to whom the new Council would report. Following its deliberations, this task force shall present a report (hereafter referred to as the “Task Force Report”) to the Senate, the designated administrative officer, and the director of the unit whose activities are the focus of the Council. The Task Force Report shall indicate the specifications that define the working relationship among the Senate, the designated administrative officer, and the director. The Task Force Report shall include at least the following: the scope and purpose of the new Council; a review of the current committees and advisory relationships to be superseded by the proposed Council; identification of the designated administrative officer and unit director to whom the Council reports; the charge to the Council; the size, composition, and appointment process of members of the Council; the Council's relationship to the Senate, the designated administrative officer, and the director including the responsibilities of these three sponsors to the Council and the responsibilities of the Council to these three sponsors; and principles for operation of the Council. The Task Force Report shall be reviewed by the Executive Committee, approved by the designated administrative officer, and then approved by the Senate. At the same time, the Senate shall approve appropriate revisions in its *Bylaws* to incorporate the Council into its council structure as defined in Article 8 of these *Bylaws*. The Task Force Report, as approved, shall be preserved with official Senate documents, serving as a record of the original agreements establishing the Council.

8.3 **Specifications in Senate Bylaws:** For each Council, Senate Bylaws shall: state its name; specify its responsibilities to the Senate; define its membership, including any voting privileges of ex officio members; and identify any exceptions or additions to the provisions of this Article particular to the Council.

8.4 **Basic Charge:**

8.4.a The Council's responsibilities to the University Senate shall include those specified for Senate committees in Article 5.2 of these *Bylaws*. In addition, each Council shall:

(1) Sponsor hearings, as appropriate, on issues within its purview that are of concern to the Senate and the campus community.

(2) Provide a mechanism for communication with the campus community on major issues facing the unit and its activities.

(3) Respond to charges sent to the Council by the Senate Executive Committee in accordance with Article 4.7.

(4) Provide an annual written report to the Senate on the Council's activities including the status of unresolved issues.

8.4.b Responsibilities to the designated administrative officer shall be specified in the Task Force Report and may include:

(1) To advise on the unit's budget, space, and other material resources, in addition to personnel, staffing and other human resources.

(2) To advise on the unit's administrative policies and practices.

(3) To advise on the charges to be given to periodic internal and external review committees.

(4) To respond to requests for review, analysis, and advice from the designated administrative officer.

(5) To meet at least annually with the designated administrative officer to review the major issues facing the unit and its activities on campus.

(6) To fulfill such other responsibilities as specified in the Task Force Report.

8.4.c Responsibilities to the unit's director shall be specified in the Task Force Report and may include:

(1) To advise on the needs and concerns of the campus community.

(2) To advise on opportunities, policies, and practices related to the unit's ongoing operations.

(3) To review and advise on unit reports, studies, and proposed initiatives.

(4) To respond to requests for review, analysis, and advice made by the director.

(5) To meet at least annually with the director to review the major issues facing the unit and its activities on campus.

(6) To fulfill such other responsibilities as specified in the Task Force Report.

8.5 **Membership and Appointment to University Councils:**

8.5.a Membership: Councils shall have nine (9) to thirteen (13) members as specified in the appropriate subsection of Article 9 of these *Bylaws.* In addition, each Council shall include an ex officio member designated by the administrative officer, and such other ex officio members as specified in Article 5.5.d of these *Bylaws.* These ex officio members shall have voice but no vote.

8.5.b Appointment: Representatives of the designated administrative officer's office and the University Senate shall agree on nominees for vacancies on the Council. These nominations shall be submitted to the designated administrative officer for approval. In addition, these nominations shall be submitted to the University Senate for approval, or for election if specified in the Council's governing documents. In exercising its powers of appointment to the Council, the Senate shall follow procedures for review and approval for Senate committee appointments specified in Article 5.5.e of these *Bylaws.*

8.5.c Terms: Rules governing beginning date and length of terms, and restrictions on reappointment shall be specified in the governing documents of each Council. The presiding officer shall serve a three (3) year term and cannot be reappointed, unless otherwise specified in the governing documents of the Council.

8.5.d Appointment of Presiding Officer: The designated administrative officer and the Senate Chair shall reach an agreement on a presiding officer, and the joint choice shall be submitted to the Senate for approval. If the presiding officer is selected from among the membership of the Council, a replacement shall be appointed to the vacated seat.

8.6 **Operational Relationship of University Councils to Sponsors:**

8.6.a The Office of the University Senate shall provide basic support for the activities of University Councils.

8.6.b The office of the designated administrative officer, through its ex officio University Council member, shall provide administrative support and serve as a liaison to other administrative units as required.

8.6.c The unit director shall provide the University Council with internal data, reports, studies, and any other materials required to support the Council's work. In addition, the director shall also arrange for unit staff to appear before the committee as requested.

8.6.d Control of the University Council's agenda shall be the responsibility of the presiding officer of the University Council and the voting members of the University Council in accordance with procedures for standing committees provided in Article 5.3.a, subject to the charges provided in Article 8.4 of these *Bylaws,* the appropriate subsection of Article 9 of these *Bylaws,* and the approved Task Force Report governing the University Council.

8.6.e Each University Council shall develop its own bylaws, which must be approved by the designated administrative officer and by the Senate.

8.6.f In addition to the required annual report, the presiding officer shall keep the Executive Secretary and Director and the Chair of the Senate informed of the major issues before the University Council and shall indicate when action or information items are likely to be forwarded for Senate consideration. In submitting recommendations for Senate action, the University Council shall inform the unit director and the designated administrative officer in advance of its recommendations. For purposes of conducting Senate business, reports from the University Council and floor privileges of the Senate shall be managed in the same manner as standing committees of the Senate defined in these *Bylaws* (3.3.c, 4.4.b). In the case where the presiding officer of the University Council is not a member of the Senate, they may report to the Senate and participate in the deliberations of the Senate subject to the provisions of Article 3.3.c of these *Bylaws.*

8.7 **Review of University Councils:**

8.7.a Five (5) years after a University Council is formed, a review of the University Council shall be undertaken jointly by the Senate and administration, and a written report issued. The review may recommend continuation of the University Council in its original form and mode of operation, modification of the University Council structure and/or operations, or discontinuance of the University Council.

8.7.b Following the initial review, the University Council and its operations shall be reviewed in conjunction with the periodic review of the *Plan.*

ARTICLE 9
UNIVERSITY COUNCIL SPECIFICATIONS

9.1 **University Library Council**

9.1.a Charge: The University Library Council has the responsibility to provide advice and to report on policy issues concerning the University Libraries to the University Senate, to the Senior Vice President and Provost, and to the Dean of Libraries (see Appendix 1 for additional responsibilities and the Library Council's Bylaws).

9.1.b Membership: The Library Council shall consist of thirteen (13) appointed members and four (4) ex officio members. The appointed members shall be: the Chair, ten (10) faculty members including at least one (1) member of the library faculty, one (1) graduate student, and one (1) undergraduate student. The four (4) ex officio members shall be a representative of the Office of the Senior Vice President and Provost, a representative of the Office of the Dean of Libraries, a representative of the Division of Information Technology, and the Chair-Elect of the Senate.

9.1.c The Chair shall be a tenured faculty member.

9.1.d Reporting Responsibilities: The University Library Council shall report to the University Senate and the Senior Vice President and Provost under the terms of responsibility defined in Article 8.4 of these *Bylaws*.

9.2 **University Research Council:**

9.2.a Charge: In addition to the charges specified in Articles 5.2 and 8.4 of these *Bylaws*, the Research Council shall be governed by the following: The Research Council is charged to formulate and continually review policies regarding research, its funding, its relation to graduate and undergraduate academic degree programs, and its service to the community. Also, the Research Council is charged to review the research needs of faculty, other researchers and students, and to make recommendations to facilitate the research process and productivity of the University. Further, the Research Council shall formulate and continually review policies on the establishment, naming, reorganization, or abolition of bureaus, centers, or institutes that do not offer programs of instruction or regularly offer courses for credit, including their relationship to graduate and undergraduate academic programs. Additionally, when it perceives problems, the Research Council has the power to undertake investigative studies and recommend solutions.

9.2.b Membership: The University Research Council shall consist of thirteen (13) appointed members and ten (10) ex officio members. The appointed members shall be the Chair and eight (8) faculty members; one (1) staff member; and three (3) students, including at least one (1) graduate and one (1) undergraduate student. Eight (8) voting ex officio members include a representative of the Vice President for Research, a representative of the Dean of the Graduate School, a representative of the Dean of Undergraduate Studies, the Director of the Office of Research Administration and Advancement, and the Chairs of four (4) subcommittees of the University Research Council as follows: Research Development and Infrastructure Enhancement Subcommittee (RDIES); Research Advancement and Administration Subcommittee (RAAS); Intellectual Property and Economic Development Subcommittee (IPEDS); and Awards and Publicity Subcommittee (APS). A representative of the President and a representative of the Senior Vice President and Provost shall serve as non-voting ex-officio members.

9.2.c The Chair shall be a tenured faculty member.

9.2.d Reporting Responsibilities: The University Research Council shall report to the University Senate and the Vice President for Research under the terms of responsibility defined in Article 8.4 of these *Bylaws* and the report establishing the University Research Council.

9.3 **University IT Council:**

9.3.a Charge: The IT Council shall advise and report on policy issues concerning the Division of Information Technology to the University Senate and the Vice President for Information Technology and CIO. In addition to such responsibilities as are enumerated in Article 8 of these *Bylaws*, and as articulated in the Bylaws of the University IT Council (see Appendix 3), the IT Council shall:

1) Respond to requests from the Division of Information Technology, extra-divisional advisory bodies (such as the Council of Deans or the Campus Student Technology Advisory Fee Committee), the University Senate, or other campus stakeholders for guidance on IT policy and implementation.

2) Advise on the Division of Information Technology's budget, material resources, personnel, staffing and human resources, and administrative policies and practices.

3) Investigate matters concerning the Division of Information Technology and recommend solutions to the University Senate, the Vice President for Information Technology and CIO, or the general campus community.

4) Advise on IT planning, including strategic and other major planning for information technology operation and development.

5) Advise on policy recommendations related to campus technology facilities, equipment, software, and services.

9.3.b Membership: The IT Council shall consist of up to thirteen appointed members, and additional non-voting ex-officio members. The appointed members shall be: the chair, one staff member, one undergraduate student, one graduate student, one professional track faculty member, one tenured faculty member, and the chairs of the IT Council Working Groups. The non-voting ex-officio members shall include a representative from the University Libraries; a representative from the Office of the Provost; a representative from the Information Technology Advisory Committee; and the Vice President for Information Technology and CIO. Additional non-voting ex-officio members may be appointed as needed, by agreement between the Vice President for Information Technology and CIO and the Senate Executive Committee.

9.3.c The chair of the IT Council shall be appointed by the Vice President for Information Technology and CIO and the Senate, as described in 8.5 of these *Bylaws*. The chair will serve a three-year term.

9.3.d Working Groups: The IT Council may create up to seven Working Groups. These groups should carry out research and make recommendations on IT issues, and work with the appropriate Division of Information Technology staff member appointed by the Vice President for Information Technology and CIO. The specific responsibilities of each Working Group shall be described in the Bylaws of the University IT Council. The chair of each Working Group shall be appointed by the Vice President for Information Technology and CIO and the Senate and shall serve a two-year term.

9.3.e Reporting Responsibilities: The IT Council shall report to the Vice President for Information Technology and CIO and to the University Senate under the terms of responsibility defined in Article 8.4 of these *Bylaws*.

ARTICLE 10
THE ATHLETIC COUNCIL

10.1 The Athletic Council

10.1.a The Athletic Council exists to help the University develop and maintain the best possible intercollegiate athletic program consistent with the academic integrity of the institution and the academic and social development of student athletes. The Athletic Council shall operate in accordance with its charter (Appendix 4), which shall specify its role, scope, responsibilities, leadership, and membership. Changes to the charter shall be approved by the President of the University.

10.1.b Membership: The charter designates its membership. The membership of the Athletic Council elected by the Senate includes:

1) Seven faculty members elected by the Senate at the annual Transition Meeting. Elected faculty representatives shall serve for a three-year term, and faculty who have served a full term shall for a period of one year be ineligible for re-election. The Senate should make every effort to assure diversity among the candidates for election to the Council.

2) One staff member elected by the Senate at the annual Transition Meeting for a three-year term. A staff member who has served a full term shall for a period of one year be ineligible for re-election.

3) The Chair of the Senate Campus Affairs Committee, or a faculty member designated by the Committee, shall serve as an ex-officio member.

10.1.c Relationship between the Senate and the Athletic Council:

1) The Council in cooperation with the Athletic Director shall submit an annual report to the Senate on the status of intercollegiate athletics at the University. This report shall at least include an analysis of admissions, academic performance, class attendance, major selection, graduation rates, budget performance, and compliance with NCAA, Conference, and campus

rules.

2) The Council shall inform the Senate for its review of any proposed amendments to the Council's charter.

ARTICLE 11
DUTIES OF THE EXECUTIVE SECRETARY AND DIRECTOR

11.1 The Executive Secretary and Director of the Senate shall be responsible for the minutes and audio recordings of all Senate meetings.

11.1.a The minutes shall include actions and business transacted, at a minimum. They shall be submitted to the Senate for approval. Copies of the approved minutes shall be made available to all chief administrative officers of Colleges, Schools, departments, and other units, and to the campus news media.

11.1.b A complete audio recording shall be made of each meeting and shall be maintained by the Office of the University Senate. In accordance with the University's Records Retention and Disposal Schedule, a copy of each audio recording, excluding only those parts recorded during closed sessions, shall be placed with the minutes in the University Archives for open access.

11.2 The Executive Secretary and Director shall also maintain the following kinds of Senate records (see Article 4.8):

(1) All material distributed to Senate members;

(2) All material received by or distributed to members of the Executive Committee;

(3) Any minutes of the Senate or the Executive Committee not otherwise included under (1) and (2);

(4) Annual reports of all committees of the Senate not otherwise included under (1) and (2);

(5) The audio records of Senate meetings;

(6) The current and all previous versions of the *Plan* and the *Bylaws;*

(7) Articles concerned with Senate structure and operation from campus and University publications as they come to the attention of the Executive Secretary and Director; and

(8) Other items deemed appropriate by the Executive Secretary and Director or the Chair of the Senate.

11.3 The Executive Secretary and Director shall store inactive records of the Senate in the University Archives.

11.4 The Executive Secretary and Director shall be responsible for the preparation of the Senate budget in accordance with Article 4.6.

11.5 The Executive Secretary and Director shall ensure that a directory of the membership of the new Senate indicating for each member the constituency, term, unit, and email address is made available on the Senate website following the annual transition of the Senate.

11.6 The Executive Secretary and Director shall ensure that contact information for all Senate officers and of all presiding officers of all Senate committees is made available on the Senate website for all members of the campus community.

11.7 The Executive Secretary and Director will normally provide a copy of the agenda and supporting material one week in advance of each Senate meeting.

11.8 The Executive Secretary and Director shall prepare for the members of the Senate and its Executive Committee, as appropriate, all agendas, minutes, reports, and other documents, with the exception of proposals relating to the Programs, Curricula, and Courses (PCC) Committee. Nonetheless, the Executive Secretary and Director shall be responsible for the distribution of all items of Senate business, and to other such committees as necessary.

11.9 The Executive Secretary and Director shall inform the Executive Committee of the status of all members of the Senate in accordance with the *Plan* (Article 3.4.a(3-4), 3.4.b(3-4), and 3.7) and these *Bylaws* (Articles 2.2, 4.1, 5.5, and 5.6).

11.10 The Executive Secretary and Director shall have the privilege of attending the meetings of all standing committees and ad hoc committees of the Senate to assist in the coordination of Senate business.

11.11 The Executive Secretary and Director shall provide information or assistance as requested for revision of the undergraduate catalog.

ARTICLE 12
ANNUAL TRANSITION OF THE SENATE

12.1 **Preparation for Transition:**

12.1.a By no later than the scheduled December meeting of the Senate, the Committee on Committees shall present to the Senate eight (8) nominees from among outgoing Senate members to serve on the Nominations Committee. The nominees shall include four (4) faculty members, one (1) exempt staff member, one (1) non-exempt staff member, one (1) graduate student, and one (1) undergraduate student. Further nominations shall not be accepted from the floor of the Senate. The Senate, as a body, shall approve the slate of nominees to serve on the Nominations Committee. The Chair-Elect of the Senate shall serve as a non-voting, ex officio member of the Nominations Committee. The Nominations Committee shall elect its own Chair from within the membership of the committee.

12.1.b The Nominations Committee shall solicit nominations from the membership of the Senate and shall present to the Chair of the Senate by April 15:

(1) A slate of at least two (2) candidates per seat from each constituency for elected membership on the Executive Committee, including those incumbent elected members who are eligible and willing to stand for reelection,

(2) Slates of candidates to replace the outgoing members of the Committee on Committees, the Campus Transportation Advisory Committee (CTAC), the University Athletic Council, and the Council of University System Faculty (CUSF), and any other committees as required by these *Bylaws,* including at least one (1) nominee for each position to be filled, and

(3) A minimum of two (2) candidates for the office of Chair-Elect.

Before reporting to the Chair of the Senate, the Nominations Committee shall secure the consent of all candidates in writing.

12.1.c~~b~~.A brief statement of each candidate's qualifications shall be sent to the voting membership of the incoming Senate ten (10) working days before the Transition Meeting of the Senate. Any further nominations made by members of the Senate and accompanied by a brief supporting statement and the consent of the candidate must be received by the Executive Secretary and Director at least twelve (12) working days before the Transition Meeting. These additional nominations shall be sent to the voting membership of the incoming Senate ten (10) working days before the Transition Meeting.

12.2 **Transition Elections:**

12.2.a Election of the Chair-Elect shall occur as provided for in section 5.7.a of the *Plan.*

12.2.b The election of members of the Executive Committee, Committee on Committees, Campus Transportation Advisory Committee (CTAC), Athletic Council, Council of University System Faculty (CUSF), and such other persons elected by the members of the Senate, shall be held after the election of the Chair-Elect.

(1) Nominations for each of these committees and councils may be submitted in accordance with Article 12.1 above.

(2) Nominations may also be received from the floor by the Chair at the Transition Meeting. Any such nomination is contingent on the consent of the candidate, which must have been secured beforehand in writing if the nomination is made in the absence of the candidate.

(3) In the event of a tie vote in the election for members of the Executive Committee or the Committee on Committees, a ballot will be distributed to each Senator in the appropriate constituency. The election to break the tie should end one (1) week from the start date.

12.3 Transition of the Senate:

12.3.a The new Senate session will begin at the Transition Meeting, which will be the last regularly scheduled meeting of the Spring semester.

12.3.b Newly elected Senators will be inducted at the Transition Meeting. Terms of office of newly elected Senators will begin, and the terms of the outgoing Senators will end, during the Transition Meeting.

12.3.c The outgoing Chair will pass the gavel to the previous Chair-Elect, who will assume the Chair role.

12.3.d The elected members of the outgoing Executive Committee and the Committee on Committees shall continue to serve until new members are elected.

12.3.e After the conclusion of the Transition Meeting, any vacancies on standing committees will be filled by the new Committee on Committees, subject to the approval of the Executive Committee and pending confirmation by the full Senate at its next regularly scheduled meeting.

APPENDIX 1
BYLAWS OF THE UNIVERSITY LIBRARY COUNCIL

1. **Charge to the Library Council:** The University Library Council has the responsibility to provide advice about policy issues concerning the University Libraries to the University Senate, to the Senior Vice President and Provost, and to the Dean of Libraries.

   A. **The Council's Responsibilities to the University Senate:**

      (1) Make recommendations for major changes and improvements in policies, operations, and services of the Libraries that represent the concerns and interests of Senate constituencies as well as other users of the Libraries. Such recommendations should specify the resource implications. Reports and recommendations to the University Senate shall be submitted to the Senate Executive Committee for placement on the agenda of the University Senate in the same manner as reports from the Senate's standing committees. It is expected that the Library Council will also inform the Senior Vice President and Provost in advance of these legislative recommendations. In addition to the mandatory annual report, the Chair of the Library Council shall keep the Chair of the Senate informed of the major issues before the Library Council and shall indicate when action or information items are likely to be forwarded for Senate consideration.

      (2) Respond to charges sent to the Library Council by the Senate Executive Committee.

      (3) Provide an annual written report of the Library Council's activities, including the status of recommendations made by the Library Council each year, and of unresolved issues before the Library Council.

   B. **The Library Council's Responsibilities to the Senior Vice President and Provost:**

      (1) Advise on the Libraries' budget, space, personnel and staffing, and other resources. It is expected that the Senior Vice President and Provost will consult the Library Council before undertaking major reviews of the Libraries with APAC and before preparing the annual budget for the Libraries.

      (2) Advise on the Libraries' administrative policies and practices.

      (3) Advise on the charges to be given to the committees to review the Dean of Libraries and to conduct the unit review of the University Libraries based on University policy

      (4) Advise on matters concerning the Libraries in conjunction with accreditation review and strategic planning.

      (5) Respond to requests for review, analysis, and advice made by the Senior Vice President and Provost.

      (6) Meet at least annually with the Senior Vice President and Provost to review the major issues facing the Libraries and its activities on campus.

      (7) The Library Council is responsible for informing the Senior Vice President and Provost of pending reports and recommendations to the University Senate.

   C. **The Library Council's Responsibilities to the Dean of Libraries:**

      (1) Advise on the needs and concerns of diverse constituencies within the campus community with respect to Library policies, services, and new resources and technology.

      (2) Advise on strategies to involve Library users in the initiation, evaluation, and integration of new Library policies, practices, procedures, and technology. Such strategies might include forums for the discussion of changes, workshops for adjusting to new technologies, and ongoing programs of Library education.

      (3) Advise on operations, policies and new opportunities.

      (4) Advise on Library planning including strategic planning and other major plans for Library operation and development.

(5) Review and advise on the Libraries' reports, studies, and proposed initiatives that have significant long-term resource implications for the Libraries.

(6) Hold at least one (1) meeting each year at which the Dean shall review major issues and plans, summarized in a State of the Libraries report distributed in advance to the Library Council.

(7) It is expected that the Library Council will adopt a broad campus perspective and that the Dean of the Libraries will inform the Library Council of the University Libraries' needs and concerns and seek advice about major modifications of policies and operations affecting the campus community.

D. **To Fulfill Its Responsibilities, the Library Council May:**

(1) Undertake investigative studies in matters concerning the University Libraries and recommend solutions to the University Senate, the Senior Vice President and Provost, the Dean of Libraries, or the general campus community.

(2) Conduct open hearings on major issues concerning the University Libraries and their activities.

(3) Communicate directly with the campus community on concerns related to support for, policies of, and services provided by the University Libraries.

2. **Composition of the Library Council:** The Library Council shall consist of thirteen (13) appointed members and four (4) ex officio members. The appointed members shall be: the Chair, ten (10) faculty members including at least one (1) member of the Library faculty, one (1) graduate student, and one (1) undergraduate student. The four (4) ex officio members shall be a representative of the Office of the Senior Vice President and Provost, a representative of the Dean of the Libraries Office, a representative of the Division of Information Technology, and the Chair-Elect of the Senate.

A. **Tenure in Office:**

(1) The Library Council Chair should be a tenured faculty member appointed for a single three-year term. Normally, the Chair shall have served as a member of the Library Council. If the Chair is serving as a regular member of the Library Council at the time of appointment, a new member shall be appointed to serve the remainder of the term the Chair has vacated. The Senior Vice President and Provost and the Senate Executive Committee shall reach an agreement on the Library Council Chair, and the joint choice shall be submitted to the University Senate for its approval.

(2) The remaining ten (10) faculty members shall be appointed for staggered two-year terms. No faculty member shall serve more than two (2) terms consecutively. For this purpose, members who have served more than a year should be considered to have served a full term.

(3) The two (2) student members shall be appointed for one-year terms. No student member should serve more than two (2) terms consecutively. For this purpose, student members who have served more than half their term should be considered to have served a full term.

(4) The Office of the Senior Vice President and Provost will appoint a member of the Provost's staff as an ex officio member of the Library Council who will have voice but not vote.

(5) The Dean of Libraries' Office will appoint an upper-level member of the Libraries' administrative staff as an ex officio member of the Library Council who will have voice but no vote.

(6) The Vice President for Information Technology and Chief Information Officer (CIO) will appoint a member of the Division of Information Technology's staff as an ex officio member of the Library Council who will have voice but no vote.

(7) The Chair-Elect of the Senate shall serve as an ex officio member of the Library Council who will have voice but no vote.

B. **Qualifications of Library Council Members:** Successful operation of the Library Council requires that the members of the Library Council understand the nature of the Libraries and represent the best interests of the campus as well as the particular interests of their specific constituencies.

1. The Library Council members should be chosen from people who can bring a campus-wide perspective to their deliberations on Library matters and who have shown interest and willingness to foster a good working relationship between the Libraries and their users.

2. Library Council members should be selected to represent as broad a range of campus disciplines and interests as possible. Faculty members should include representatives from both the professional and arts and sciences colleges, and within these constituencies, representatives of the arts and humanities, social sciences, and physical and biological sciences.

C. **The Appointment Process:** In the spring of each year, the Chair of the University Library Council shall notify the representative of the Office of the Senior Vice President and Provost and the Chair-Elect of the Senate of the appointments required for the following academic year. The representative of the Office of the Senior Vice President and Provost and the Chair-Elect of the Senate shall draw up a slate of nominees who will agree to serve, and the slate will be submitted to the Senior Vice President and Provost and the Committee on Committees for approval. The list of nominees for Library Council membership shall be submitted to the University Senate for approval. Ordinarily, the slate will be presented at the same Senate meeting at which other committee slates are approved. Dates of appointment and beginning of terms shall correspond with those of Senate committees. Replacement of Library Council members will take place through the same consultative process as the initial appointment, with submission of names to the Senate occurring as needed.

3. **Operation of the Library Council:** Effective and efficient Library Council operation will require adequate support and full cooperation among the Senate, the Senior Vice President and Provost, the Dean, and their offices.

A. The Office of the University Senate or its designee will provide normal committee support to the Council, including maintaining mailing lists, reproducing Library Council documents, keeping a copy of Library Council minutes, maintaining files for the Library Council, and arranging meeting rooms.

B. The Office of the Senior Vice President and Provost, through its ex officio Library Council member, will provide liaison to other administrative units, such as the Office of Institutional Research, Planning and Assessment, for their reports, data, or assistance. The Office of the University Senate will also provide website space for the Library Council.

C. The Dean of the Libraries will provide the Library Council with internal data, reports, studies, etc. as needed to support the Library Council's work. The Dean will also arrange for unit staff to present testimony concerning such reports as the Library Council finds useful in carrying out its responsibilities. The Dean's assistance to the committee shall also include providing the Library Council members with the opportunity to attend an appropriate orientation session dealing with the Libraries.

D. Control of the Library Council's agenda will be the responsibility of the Library Council Chair and the voting members of the Library Council.

E. While being responsive to the needs of the Senior Vice President and Provost and the Senate in a timely manner is necessary, the sponsoring parties and the Dean of the Libraries must not attempt to micro-manage the ongoing operation of the Library Council. In turn the Library Council must not attempt to micro manage the Libraries.

F. The Library Council shall meet as necessary, but in no case less than once per semester. Meetings may be called by the Chair. In addition, upon receiving a request of any three members of the Library Council, the Chair shall call a meeting. A majority of the voting members of the Library Council shall constitute a quorum for the conducting of official business of the Library Council.

4. **Operational Relationship of the Library Council to its Sponsors:**

A. For purposes of University Senate action, a Library Council created through Senate action will appear in essentially the same role as a standing committee of the University Senate.

B. The Chair may present reports and recommendations to the Senate but will not have a vote in Senate proceedings, unless he or she is a member of the Senate.

C. Since the committees of the Senior Vice President and Provost range widely in form and function, and do not operate under a formal plan of organization and bylaws, there is no need to specify the Library Council's standing in the same fashion. For other purposes, such as APAC review of the Unit, the Library Council might be consulted like a College Advisory Council (that colleges will have under the shared governance plan) could be.

D. The Dean of Libraries will ordinarily meet with the Library Council and have a voice in its deliberations. Since one of the three main functions of the Library Council is to advise the Dean, the Dean shall not formally be a member of the Library Council. On formal reports and recommendations of the Library Council to the University Senate or to the Senior Vice President and Provost, the Dean of the Libraries may send a separate memorandum to the Senate or the Senior Vice President and Provost, as appropriate, supporting or opposing the report or the recommendations, and providing rationale for the Dean's position.

5. **Review of the Library Council:** The Library Council and its operations will be reviewed in conjunction with the periodic review of the Senate and the *Plan*.

APPENDIX 2
BYLAWS OF THE UNIVERSITY RESEARCH COUNCIL

{To be inserted once available}

APPENDIX 3
BYLAWS OF THE UNIVERSITY IT COUNCIL

1. **Charge to the University Information Technology (IT) Council**: The IT Council has the responsibility to facilitate alignment of vision, priorities, and pace of IT investments and to recommend IT policies to the University Senate and administration. The IT Council is supported by Working Groups, which facilitate campus-wide communication related to IT matters.

A. **The Council's Responsibilities to the University Senate:**

1) Advise on strategic issues involving the University's use of IT, information security, access, retrieval and content stewardship, and telecommunication and knowledge dissemination.

2) Bring IT initiatives and proposals to the Senate for consideration and review.

3) Keep the Senate informed of strategic IT matters through periodic updates.

4) Respond to charges sent to the IT Council by the Senate Executive Committee.

5) Provide an annual written report of the IT Council's activities.

B. **The IT Council's Responsibilities to the Vice President for Information Technology and Chief Information Officer (CIO):**

1) Advise on policy recommendations related to campus technology facilities, equipment, software, and services - particularly in the areas of computing (both academic and administrative), networking, and telecommunications.

2) Advise on IT planning, including strategic and other major planning for information technology operation and development.

3) Advise on the Division of Information Technology's budget, space, and other material resources, in addition to personnel, staffing and other human resources.

4) Advise on the Division of Information Technology's administrative policies and practices.

5) Respond to requests for review, analysis, and advice made by the Vice President for Information Technology and CIO.

C. **The IT Council's Responsibilities to the Deans, the Campus Student Technology Advisory Fee Committee, and the Campus Community:**

1) Ensure the distribution of information concerning available campus technology services and how they might be best used to serve the campus community.

2) Seek input from current and prospective users concerning types of technology services the campus can provide.

3) Respond to input from current users concerning the quality of campus technology services.

D. **To Fulfill Its Responsibilities, the IT Council May**:

1) Investigate matters concerning the Division of Information Technology and recommend solutions to the University Senate, the Vice President for Information Technology and CIO, or the general campus community.

2) Conduct open hearings on major issues concerning the Division of Information Technology and its activities.

3) Communicate directly with the campus community on concerns related to the Division of Information Technology's services and policies.

2. **Organizational Structure of the IT Council:** The IT Council shall include five standing Working Groups, each of which will have a chair.

3. **Composition of the IT Council:** The IT Council shall consist of eleven appointed members and additional non-voting ex-officio members. The appointed members shall be: the chair, one staff member, one undergraduate student, one graduate student, one professional track faculty member, one tenured faculty member, and the chairs of the five IT Council Working Groups. The non-voting ex-officio members shall be a representative from the University Libraries; a representative from the Office of the Provost; a representative from the Information Technology Advisory Committee (ITAC); and the Vice President for Information Technology and CIO. Additional non-voting ex-officio members may be appointed as needed, by agreement between the Vice President for Information Technology and CIO and the Senate Executive Committee.

A. **Tenure in Office:**

1) The IT Council chair should be a tenured faculty member, and is appointed for a single, three-year term. Normally, the chair shall have served as a member of the IT Council. If the chair is serving as a regular member of the IT Council at the time of appointment, a new member shall be appointed to serve the remainder of the term the chair has vacated. The Vice President for Information Technology and CIO and the Senate Chair shall reach an agreement on the IT Council chair, and the joint choice shall be submitted to the University Senate for its approval.

2) The five Working Group chairs shall be appointed for staggered two-year terms. No working group chair shall serve more than two terms consecutively. For this purpose, members who have served more than a year should be considered to have served a full term.

3) The two faculty members (professional track and tenured) shall be appointed for two-year terms. No faculty member shall serve more than two terms consecutively. For this purpose, members who have served more than a year should be considered to have served a full term.

4) The staff member shall be appointed for a two-year term. No staff member shall serve more than two terms consecutively. For this purpose, members who have served more than a year should be considered to have served a full term.

5) The two student members shall be appointed for one-year terms. No student member should serve more than two terms consecutively. For this purpose, student members who have served more than half their term should be considered to have served a full term.

6) The Dean of the Libraries will appoint a representative from the University Libraries as a non-voting ex officio member of the IT Council.

7) The Provost will appoint a representative from the Office of the Provost as a non-voting ex-officio member of the IT Council.

8) The Information Technology Advisory Committee (ITAC) will appoint a representative from the committee as a non-voting ex-officio member of the IT Council.

9) The Vice President for Information Technology and CIO, or a designee, shall serve as a non-voting ex-officio member of the IT Council.

B. **Qualifications of IT Council Members:** Successful operation of the IT Council requires that its members understand the nature of the Division of Information Technology and represent the best interests of the campus as well as the particular interests of their specific constituencies.

1) IT Council members should be chosen from people who can bring a campus-wide perspective to their deliberations on IT matters and who have shown interest and willingness to foster a good working relationship between the Division of Information Technology and its users.

2) IT Council members should be selected to represent as broad a range of campus disciplines and interests as possible. Faculty members should include representatives from the various disciplines on campus ranging from the arts and humanities and social sciences to the physical and biological sciences and engineering.

C. **The Appointment Process:** In the spring of each year, the Senate Office shall notify the Vice President for Information Technology and CIO and the Chair of the Senate of the appointments required for the following academic year. The Vice President for Information Technology and CIO and the Chair of the Senate shall draw up a slate of nominees who will agree to serve, and the slate will be submitted to the Committee on Committees for approval. The final slate of nominees for IT Council membership shall be submitted to the University Senate for approval. Ordinarily, the slate will be presented at the same Senate meeting at which other committee slates are approved. Dates of appointment and beginning of terms shall correspond with those of Senate committees. Replacement of IT Council members will take place through the same consultative process as the initial appointment, with the submission of names to the Senate occurring as needed.

4. **Operation of the IT Council**

A. The Division of Information Technology or its designee will provide normal committee support to the Council, including maintaining mailing lists, reproducing IT Council documents, keeping IT Council minutes and agendas on an IT governance website, and arranging meeting rooms.

B. Control of the IT Council's agenda will be the responsibility of the IT Council chair and the voting members of the IT Council.

C. While being responsive to the needs of the Vice President for Information Technology and CIO and the Senate in a timely manner is necessary, the Working Groups and the sponsoring parties - as well as the Deans, the Campus Student Technology Fee Advisory Committee, and the campus community - must not attempt to micro-manage the ongoing operation of the IT Council. In turn, the IT Council must not attempt to micro-manage the Division of Information Technology.

D. The IT Council should typically meet once every month and shall meet at least once per semester. Meetings will be scheduled by Division of Information Technology staff, in consultation with the IT Council chair and the Vice President for Information Technology and CIO.

5. **Working Groups of the IT Council:** The Working Groups will serve in an advisory capacity to the IT Council. These groups should carry out research and make recommendations on IT issues, and shall each work with the appropriate Division of Information Technology staff member, as appointed by the Vice President for Information Technology and CIO.

A. **The five Working Groups shall be:**

1) **IT Infrastructure Working Group,** which focuses on building and maintaining a sound, advanced, secure, and productive physical information technology infrastructure (including but not limited to facilities, hardware, networks, and software) capable of supporting broad and effective use by students, faculty, and staff throughout the institution, including remote University members such as agricultural extension offices.

2) **Learning Technologies Working Group**, which provides the vision, priorities, and pace for enterprise learning technology solutions and services to be undertaken on campus. Its work focuses on endorsing the adoption of new learning technology solutions, as well as making recommendations for upgrading or decommissioning existing services. Working group members are nominated by the Deans.

3) **Research Technologies Working Group,** which provides the vision, priorities, and pace for enterprise research technology solutions and services to be undertaken on campus. Its work focuses on endorsing the adoption of new research technology solutions, as well as making recommendations for upgrading or decommissioning existing services. Working group members are nominated by the Deans.

4) **Administrative Systems Working Group,** which advises the Vice President for Information Technology and CIO in matters of enterprise-wide administrative system technology decisions and priorities.

5) **IT Security Working Group,** which advises the Vice President for Information Technology and CIO on IT security matters. The focus is on securing the integrity of information technology resources, safeguarding institutional information, protecting the privacy of University community members in their use of IT, and ensuring the continuity of the institution's IT resources and information repositories in the face of possible disaster scenarios.

B. **Composition of the Working Groups:** Each Working Group will have a chair appointed by the Vice President for Information Technology and CIO and the Senate Chair for a two-year term. The membership of each Working Group will be appointed by the Vice President for Information Technology and CIO unless otherwise specified above (5.A.2 and 3), but will be flexible so that additional members can be engaged in the decision-making and review process as appropriate. The membership of each Working Group shall include a combination of faculty, staff, and students.

C. Terms on Working Groups shall be two (2) years for faculty and staff. Appointments to two-year terms shall be staggered: that is, as far as practical, half of the terms from each faculty or staff constituency shall expire each year. Terms shall begin on July 1 of the appropriate year.

D. **Meetings of the Working Groups:** The Working Groups usually meet three to four times a semester.

E. **Working Group Responsibilities:**

1) Provide knowledge in a particular area and serve as an advisory board, by which the IT Council can route items for review and comment.

2) Submit proposals and issues to the IT Council for consideration and/or funding.

3) Assist in the annual review and update of the Information Technology Strategic Plan.

6. **Operational Relationship of the IT Council to its Sponsors:**

A. For purposes of University Senate action, the IT Council will appear in essentially the same role as a standing committee of the University Senate.

B. The IT Council chair may present reports and recommendations to the Senate but will not have a vote in Senate proceedings, unless he or she is a member of the Senate.

C. The Vice President for Information Technology and CIO is an ex-officio member of the IT Council and has a voice in its deliberations.

7. **Review of the IT Council:** The IT Council and its operations will be reviewed in conjunction with the periodic review of the Senate and the Plan.

8. Amendments: Amendments to these Bylaws shall be provided to the IT Council members a minimum of seven calendar days in advance of any regular meeting. Approval shall require a two-thirds vote of the present and voting regular membership of the Council. Upon approval, a revised copy of the Bylaws shall be sent to the Senate Office.

APPENDIX 4
CHARTER OF THE UNIVERSITY ATHLETIC COUNCIL

The University of Maryland at College Park is dedicated to higher learning, research, and public service. An intercollegiate athletic program can significantly contribute to the learning and the public service components of the Campus Mission. The operation of a successful athletic program fosters spirit, identity and a sense of pride within the campus community and provides talented student-athletes with the opportunity to enrich their collegiate experience through participation in a challenging and competitive athletic program. Excellence of the athletic program at College Park stems not only from successful competition, but more importantly, from the general involvement in the Campus milieu of student-athletes who will earn degrees and who in other respects, embody qualities with which the institution can identify. Most importantly, both athletic success and academic integrity are the crucial elements in judging the excellence of the athletic program at the University of Maryland at College Park.

The importance of faculty involvement and influence in the institutional control and operation of an excellent athletic program cannot be overestimated. Faculty advice and participation will enhance the integrity of the athletic program in terms of academic performance, rules compliance, and compatibility of athletic programs with the mission of the campus.

PURPOSE OF THE ATHLETIC COUNCIL

First and foremost, the Athletic Council exists to help the University develop and maintain the best possible intercollegiate athletic program consistent with the academic integrity of the institution and the academic and social development of student athletes. The Athletic Council is the primary body, which advises the President on all matters relating to intercollegiate athletics. It is responsible for formulation and recommendation of policy matters affecting intercollegiate athletics and for monitoring the implementation of such policy by the intercollegiate athletics program. The Council, on behalf of the President, provides the necessary faculty input and participation in intercollegiate athletics as required by the Big Ten Conference, National Collegiate Athletic Association and the University of

Maryland at College Park. The Council does not execute policy but serves to influence policy development and administration.

This document delineates the responsibilities, processes, and membership of the Athletic Council at the University of Maryland at College Park. It is expected that the Council will be proactive in its task of preparing policy recommendations and monitoring their implementation by the intercollegiate athletics program. The Council expects to have the full support of the Campus in the responsible performance of its duties.

FUNCTION/DUTIES OF THE ATHLETIC COUNCIL

The major function of the Athletic Council is to assist the President and the Director of Intercollegiate Athletics in the exercise of "institutional responsibility and control of intercollegiate athletics" as required by the constitution of the Big Ten Conference, the National Collegiate Athletic Association and the University of Maryland at College Park. The Council functions in advisory, compliance, liaison, and representative capacities. The Athletic Council shall meet at least four times each year, twice in each semester, and at such other times as needed to carry out the duties of the Council. Specific duties of the Council shall include but not be limited to the following:

1. Promote an understanding of intercollegiate athletics among faculty, students, staff, alumni and other members of the University of Maryland at College Park community.

2. Promote the adoption and implementation of appropriate policies for the admission and continuing eligibility of student athletes at the University of Maryland at College Park.

3. Monitor the preparation of the athletic budget by the Athletic Director during the regular budgetary process and make recommendations to the Athletic Director and the President concerning sources (i.e. student athletic fees) and allocations of funds.

4. Participation in the selection process for the Director of Intercollegiate Athletics and the head coaches in all sports including, if possible, informal meetings of the final candidates with the Executive Committee in the interview process. A faculty member from the Athletic Council should be included on all search committees for head coaches.

5. Establish criteria and make recommendations, with the advice of the Athletic Director, regarding which sports shall be certified as intercollegiate sports.

6. Recommend policies concerning athletic schedules, practice, the number of contests to be played each year in each sport and the NCAA category of schools with which it is desirable to compete.

7. Establish guidelines for and make recommendations regarding the acceptance of invitations to post-season events, special holiday games, or other events outside the regular season schedule.

8. Review and formulate policies concerned with substance abuse that will provide protection to the health of student-athletes and ensure that such policies have a strong educational emphasis.

9. Review and endorse policy on physical facilities necessary for the conduct of a competitive Division I-A program.

10. Review and formulate policies on recruitment and the awarding of athletic grants and scholarships to student-athletes who meet eligibility standards.

11. Review and approve the criteria for departmental awards in recognition of athletic and academic achievement.

12. Review athletic event price schedules, seating priorities and allocation of tickets to various groups.

13. Monitor the advisement, academic support and counseling services available to student-athletes.

14. Review and formulate policy concerning the conduct of home athletic contests, particularly with respect to the protection and safety of participants and spectators.

15. Review and formulate policy regarding the expectations of and behavior of coaches and student-athletes.

16. Review and formulate policy regarding the expectations of and behavior of cheerleaders and their advisors.

17. Assist with the development of official reports to be submitted by the President for filing with the conference or appropriate associations.

18. Review with appropriate authorities the financial audits of the Department of Intercollegiate Athletics.

19. Monitor the activities of the Department of Intercollegiate Athletics to make sure that they are in compliance with Conference (Big Ten) and Association (NCAA) bylaws, regulations and legislation.

In fulfilling its functions/duties, the Athletic Council

- must maintain confidentiality;
- shall have available to it complete information on all items which appear for its consideration and shall have full opportunity for discussion of each item before action is taken;
- shall have available full and current information on the financial, academic and related activities of the intercollegiate athletics program; and
- is authorized to recommend to the President the employment of experts from outside the Campus when their advice is needed.

RESPONSIBILITIES OF THE CHAIR OF THE ATHLETIC COUNCIL

The Athletic Council has a Chair who is selected by the President from the faculty. The duties of the Chair shall include:

1. Serve as a spokesperson for the Council in all contacts with the media.

2. Serve as the Faculty Representative to the Big Ten Conference and the National Collegiate Athletic Association (NCAA).

3. Chair meetings of the Athletic Council and the Executive Committee of the Council.

4. Call regular meetings of the Athletic Council and such special meetings as may be necessary.

5. Prepare the agenda for meetings of the Athletic Council and of the Executive Committee of the Council.

6. Represent the campus, as authorized by the President, at meetings of the NCAA, Big Ten, United States Intercollegiate Lacrosse Association, United States Olympic Committee, Intercollegiate Athletic Association of America, College Football Association and other groups which establish international, national and regional policies for intercollegiate athletics.

7. Advise the President and serve as spokesperson to the faculty on behalf of the President on appropriate matters.

8. Report to the President on all actions taken by the Athletic Council.

9. Work with the Director of Intercollegiate Athletics in coordinating and carrying out the functions of the Athletic Council.

10. Monitor activities of the Department of Intercollegiate Athletics and confer regularly with the President on matters which should come to the President's attention.

11. Ensure that required reports and recommendations from the Athletic Council are provided to the President.

12. Report to the President and the Athletic Director on the concerns of the Athletic Council relative to athletics and to interpret to the faculty and other groups the University's athletic policies and activities.

13. Ensure that all actions of the Chair and the Executive Committee made on behalf of the Council are properly recorded and reported to the full membership of the Council in a timely manner.

14. Coordinate with the President's Office all financial support necessary to carry out the duties of Chair, including the development of an annual budget for this support; and the approval of all requests for expenditures and expense reimbursements made for this purpose. The President's Office is the administrative unit responsible for providing appropriate financial support to the Chair of the Athletic Council/Faculty Athletic Representative, and for approving both the annual budget request for this support as well as all expenditures, and expense reimbursements made for this purpose.

15. Know, recognize, and comply with the laws, policies, rules and regulations governing the University and its employees, and the rules of the National Collegiate Athletic Association (the "NCAA") and the Big Ten. Inform the Athletic Department Compliance Officer immediately of any suspected violation. Assist, as requested, in the investigation and reporting of those violations.

RESPONSIBILITIES OF THE VICE CHAIR OF THE ATHLETIC COUNCIL

The Athletic Council has a Vice-Chair who is selected by the President from the faculty. The duties of the Vice-Chair shall include:

1. Assist the Chair of the Council with conducting the business and meeting of the Council.

2. Conduct meetings of the Council in the absence of the Chair.

3. Write periodic articles for University publications about the actions of the Council.

4. Serve on the Executive Committee of the Council.

5. Coordinate the activities of and serve as an ex officio member to standing committees of the Council.

6. Know, recognize, and comply with the laws, policies, rules and regulations governing the University and its employees, and the rules of the National Collegiate Athletic Association (the "NCAA") and the Big Ten Inform the Athletic Department Compliance Officer immediately of any suspected violation. Assist, as requested, in the investigation and reporting of those violations.

ATHLETIC COUNCIL MEMBERSHIP

Intercollegiate Athletics plays an important role in fostering pride and spirit in the University community. The Athletic Council membership is designed to be representative of this community and shall consist of faculty, administration, staff, students and alumni. The membership shall include minorities, women and men, and thorough consideration will be given to ensure a balanced representation on the Council. The Athletic Council shall consist of twenty voting and five non-voting members appointed by the President or elected by the Senate as follows:

Voting Members of the Athletic Council

- The Athletic Council has a Chair who is selected by the President from the faculty. The duration of the Chair's membership on the Council is determined by the President. The initial appointment is for a five year term which may be renewed by the President.

- The Athletic Council has a Vice-Chair who is selected by the President from the faculty. The duration of the Vice-Chair's membership on the Council is determined by the President. The initial appointment is for a three year term which may be renewed by the President.

- Seven faculty members of the Athletic Council will be elected by the Senate. These elected faculty members will serve for a three year period and are not eligible to serve a second consecutive three year period. The Senate should make every effort to assure diversity among the elected members.

- The Faculty member who is Chair of the Campus Affairs Committee of the Senate or a designee from the Committee who must be a faculty member is a member of the Athletic Council.

- One Academic Dean appointed by the Provost. The appointment is for a one year term which may be renewed by the Provost.
- Two staff members, one who is appointed by the President for a three year period and one who is elected for a three year period by the Senate. These staff members will serve on a staggered basis and are not eligible to serve a second consecutive three year period.
- The Vice President for Student Affairs.
- One representative from the “M” Club. The appointment is for one year.
- One representative from the Terrapin Club. The appointment is for one year.
- One student representative from the Student Government Association. The appointment is for one year.
- One undergraduate female athlete. The appointment is for two years and the student should maintain eligibility in her sport.
- One undergraduate male athlete. The appointment is for two years and the student should maintain eligibility in his sport.
- One graduate student. The appointment is for two years and the student should maintain good standing in the Graduate School.

Non-Voting Members of the Athletic Council

- The Director of Intercollegiate Athletics.
- A Representative from the President’s Office.
- A Representative of the Office of General Counsel.
- The Director of the Student Health Services.
- The Director of the Office of Alumni Programs for the University of Maryland at College Park.
- A current head coach selected by the coaches as their representative. This appointment will be a one-year appointment with a three year limit.

In making all non-elected appointments to the Athletic Council, the President should solicit recommendations from the following advisory groups or persons: Executive Committee of the Athletic Council, President of the Student Government Association, President of the Graduate Student Government, Dean of the Graduate School, and Director of Intercollegiate Athletics. The term of office of all members of the Council shall begin with the first meeting of the new academic year.

Vacancies occurring on the Council due to resignation or other cause will be filled as they occur. If the vacancy is one of the members of the Council elected by the Senate, the Senate will be asked to elect a replacement to fill the vacancy. For all other vacancies, the President will solicit nominations from the appropriate groups and appoint a replacement to fill the remainder of the unexpired term. Persons appointed to fill a partial term on the Council will be eligible for election or appointment to a full term as appropriate for their membership category.

COMMITTEES OF THE ATHLETIC COUNCIL

Committees of the Athletic Council shall include an Executive Committee, Standing Committees of the Council, and Ad-Hoc Committees as needed. The major responsibilities and membership of these Committees of the Athletic Council follow.

1. **Executive Committee.** The membership of the Committee is as follows: The Chair of the Athletic Council who will

serve as chair, the Vice-Chair of the Athletic Council, chairs of the five standing committees of the Athletic Council, the representative from the President's office, and a staff or student member of the Athletic Council. If one or more of the Chairs of the standing committees are not faculty, the membership of the Executive Committee will be adjusted to include four faculty in addition to the Chair. Total membership of the Executive Committee will not exceed eight at any time. The responsibilities of the Executive Committee shall include the following:

- Meet on matters calling for immediate action and at times when meetings of the full Athletic Council are not possible.
- Identify and assign problems to standing subcommittees and ad-hoc committees for study and receive reports from these committees.
- Serve as the personnel committee of the Council upon request of the President.
- Review compliance reports submitted by the Department of Intercollegiate Athletics and ensure that the Department is in compliance with all Conference and Association policies.
- Advise the President on an emergency basis.
- Recommend faculty and staff for membership on the Athletic Council.

2. **Standing Committees of the Athletic Council.** The Chair of the Athletic Council will select the Chairs of the Standing Committees and will appoint each committee and, with the exception of the Academic Committee, will appoint each committee after soliciting volunteers from the Council membership.

   a. **Academic Committee.** All faculty members of the Council are members of the committee. The general role of the Academic Committee is to ensure that appropriate academic standards are established and maintained for all student-athletes and that all participants recognize the priority of successful academic performance by all student-athletes. In fulfilling this function, the Committee shall make appropriate recommendations to the Athletic Council. In particular, the Committee shall have the following duties:

      - Recommend policies and procedures regarding standards and criteria for admission of student-athletes.
      - Recommend academic policies and procedures regarding standards and criteria for continuing eligibility of student-athletes to participate in intercollegiate sports.
      - Consider and decide academic appeals of student-athletes concerned with eligibility.
      - Review every semester the academic program and progress of student-athletes.
      - Recommend policies for and monitor the activities of the academic support services provided to the student-athletes.
      - Recommend policies regarding post-season and tournament participation by athletic teams.
      - Recommend policies regarding scheduling and practice time.

   b. **Budget and Facilities Committee.** The general purpose of this Committee is to monitor but not manage those activities of the Athletic Department pertaining to budget and facilities. In fulfilling this function, the Committee shall make appropriate recommendations to the Athletic Council. More specifically, responsibilities of the Committee shall include the following:

      - Monitor the preparation of the athletic budget(s) by the Director of Intercollegiate Athletics.
      - Review and analyze for the Council the final budget(s) submitted by the Director of Intercollegiate Athletics to the President.
      - Establish criteria and make recommendations, with the advice of the Director of Intercollegiate Athletics, regarding which sports shall be certified as intercollegiate sports.

- Review policies regarding the number and distribution of athletic scholarships to be awarded annually.
- Review and recommend policies for athletic event price schedules, seating priorities and allocation of tickets to various groups.
- Review and recommend policies regarding utilization and development of intercollegiate athletic facilities.
- Monitor the financial accountability of the Department of Intercollegiate Athletics.

c. **Student Life Committee.** This Committee is concerned with all non-academic aspects of the student-athlete's involvement with the University. In fulfilling this function, the Committee shall make appropriate recommendations to the Athletic Council. More specifically, the responsibilities of the Committee shall include the following:

- Review and recommend policies concerning the nature and type of health screening and drug testing.
- Review and recommend policies regarding practice schedules.
- Review and recommend policies for determining when health and other non-academic factors will be used to restrict a student's involvement in intercollegiate athletics.
- Review and recommend policies for and monitor activities of non-academic support programs and placement services.
- Review and recommend policies regarding scholarship awards and retention of these awards.
- Review and recommend policies for housing assignments.
- Assist the Athletic Council in assuring the personal and social development of all student-athletes and their full integration into campus life.

d. **External Affairs Committee.** This Committee is concerned with external activities of the Department of Intercollegiate Athletics. In fulfilling this function, the Committee shall make appropriate recommendations to the Athletic Council. More specifically, the responsibilities of the Committee shall include the following:

- Review and endorse fundraising activities.
- Review and recommend policies for complementary distribution of tickets to athletic events.
- Review and recommend guidelines and/or policies for all sports marketing activities (i.e. sports camps, special events, endorsements, etc.)
- Review and recommend guidelines and/or policies for interactions with alumni and friends of the Athletic Department including the Terrapin Club, the "M" Club, and the Maryland Education Foundation.
- Review and recommend policies and/or guidelines for all media interactions.

e. **Professional Sports Counseling Panel (PSCP).** The PSCP is a committee of the Athletic Council authorized under NCAA by-law 12.3.4 to advise and assist student athletes in preparation for professional athletic careers. Consonant with its charge, the University of Maryland, College Park PSCP provides:

- Education and advice to student athletes about NCAA amateurism rules and professional sports careers.
- Oversight to the Athletic Department's implementation of University and NCAA regulations regarding contacts between student athletes and agents.
- Advice to the Athletic Council on matters related to its charge.

3. **Ad-Hoc Committees.** The Chair of the Athletic Council, upon advice of the Council, will appoint Ad-Hoc

Committees as needed. Membership on these committees will be on a volunteer basis or by appointment by the Chair of the Council after seeking advice from the Executive Committee.

MEETINGS OF THE ATHLETIC COUNCIL

The Chair of the Council serves as the spokesperson for the Council. Meetings of the Council are open only to Council members and invited guests. Individuals who are not members of the Council, but who wish to attend a specific meeting should seek the prior approval of the Chair. Information provided to Council members concerning specific personnel or compliance matters will not be divulged by individual members without permission of the Chair.

APPENDIX 5
PROCEDURES FOR ELECTIONS OF UMCP REPRESENTATIVES TO THE COUNCIL OF UNIVERSITY SYSTEM FACULTY (CUSF)

The Chair of CUSF is not a member of CUSF. Thus, if the Chair is from College Park, a replacement must be named. At the end of his/her term as Chair, if his/her term on CUSF is not finished, he/she resumes his/her position as a CUSF member.

The normal term for CUSF representatives is three (3) years, with two alternates serving three (3) year terms; if both alternates are elected at the same time, priority to be a replacement shall be in order of votes received. If a regular representative is unable to serve out his/her term, an alternate replaces him/her for the remainder of the term, and a new alternate is named. The replacement representative shall be chosen in order of number of votes received. The Office of the University Senate will identify a replacement alternate subject to confirmation by the Senate Executive Committee.

The University Senate will elect representatives to CUSF each spring. The Senate Nominations Committee will solicit candidates and will present a slate to the Chair of the Senate with at least one (1) candidate for each vacant position to be filled. At the Transitional Meeting of the Senate, faculty Senators will vote to elect representatives to CUSF. Each faculty Senator shall have as many votes as there are open positions. If there are more candidates than positions, the person(s) receiving the most votes, in order, are declared representatives. The person receiving the next most votes is declared alternate. The remaining person, in order of vote tally, will be asked to move into the alternate position if the previous paragraph comes in to play. A record of the outcome of the election will be retained by the Executive Secretary and Director of the University Senate. If there are not sufficient candidates, or the pool of candidates is exhausted, representatives are chosen by the Executive Committee.

APPENDIX 6
PROCEDURES FOR ELECTIONS OF UMCP REPRESENTATIVES TO THE COUNCIL OF UNIVERSITY SYSTEM STAFF (CUSS)

The mission of the Council of University System Staff (CUSS) is to provide a voice for Staff employee concerns in reference to basic decisions that affect the welfare of the University System of Maryland (USM) and its employees. CUSS speaks for all non-exempt and exempt staff employees on Regular and Contingent II Status, who are not represented by a union under collective bargaining.

CUSS is comprised of Staff employees representing each USM institution and the USM Office (USMO). Institution membership is proportionate to the number of Staff employees at the individual institutions, with a minimum of two (2) primary members and two (2) alternate members per institution. Representation on CUSS from each constituent institution is apportioned according to the following formula: 1 to 999 eligible employees, 2 representatives; over 1000 eligible employees, 3 representatives. Staff at each constituent institution shall also select an alternate who shall substitute for a regular member of CUSS when needed. Alternates should be selected at the same time and in the same manner as regular members. A delegation may include more than one (1) alternate who is eligible to cast a vote for an absent member provided the member has given prior notification to the Chair of CUSS. The University of Maryland, College Park is entitled to three (3) representatives, and up to three (3) alternates.

As defined in 6.10.f of the Senate *Bylaws*, the Senate Staff Affairs Committee is responsible for administering the CUSS nomination and election process. Definitions of eligible staff shall be determined by the Board of Regents and CUSS. The CUSS elections will be administered in the spring semester every other year, as the terms of the current CUSS representatives are expiring. The Staff Affairs Committee will solicit candidates from the eligible staff population and will present ballots to the same population with at least one (1) candidate for each vacant position to be filled.

Eligible staff employees will vote to elect representatives to CUSS. If there are more candidates than positions, the person(s) receiving the most votes, in order, are declared representatives. The person(s) receiving the next most votes are declared alternate(s). A record of the outcome of the election will be retained by the Executive Secretary and Director of the University Senate.

New members shall begin their terms August 1. The normal term for CUSS representatives and alternates is two (2) years. If a regular representative is unable to serve out his/her term, an alternate replaces him/her for the remainder of the term, and a new alternate is named. The replacement representative shall be chosen in order of number of votes received.

APPENDIX 7
PROCEDURES FOR REVIEW OF COLLEGE AND SCHOOL PLANS OF ORGANIZATION

1. In accordance with Article 11 of the Plan, each College, School, Department and other Academic Program, and the Library, shall have a Plan of Organization.

    a. The Plan of Organization of each College, School, and the Library shall be reviewed by the University Senate according to the procedures detailed in section 2 of this appendix. All revisions to such Plans of Organization must be approved by the University Senate and the President prior to taking effect.

    b. The Plan of Organization of a Department or other Academic Program shall be reviewed and revised by the Faculty Advisory Committee of the College to which it belongs. In the review and revision of such Plans, the University Senate may act in an advisory capacity if asked to do so by the College.

2. Each College, School, and the Library shall review and revise its Plan of Organization in accordance with Article 11.3 of the Plan and shall submit it to the University Senate for review.

    a. Revised Plans of Organization shall be reviewed by the Senate Elections, Representation, and Governance (ERG) Committee for compliance with the University's Plan of Organization, University policy, and best practices of shared governance.

    b. The Senate Faculty Affairs Committee shall review the Appointment, Promotion, and Tenure or Permanent Status section of each Plan and any related documentation for compliance with the University's APT Policy. The Senate Faculty Affairs Committee shall also review the Appointment, Evaluation, and Promotion Policy and any related documentation for compliance with University policies on professional track faculty and the University's Guidelines for Appointment, Evaluation, and Promotion of Professional Track Faculty.

    c. The ERG and Faculty Affairs Committees shall communicate any concerns or requested revisions to the respective College, School, or Library.

    d. Once all necessary revisions have been made, the ERG and Faculty Affairs Committees shall certify that they find the Plan to be in compliance and the revised Plan of Organization shall be submitted to the College Assembly or equivalent for approval.

    e. Upon approval of the College Assembly or equivalent, the ERG Committee shall submit the revised Plan and its accompanying report to the Senate Executive Committee for review and placement on the Senate Agenda.

    f. The revised Plan of Organization shall require final approval by the University Senate and the President.

3. During the initial implementation of a recently approved Plan of Organization, a College, School, or the Library may submit additional minimal or technical amendments to the Senate within one year of final approval by the University President. These revisions will undergo an expedited review process by the Senate ERG Committee, and by the Faculty Affairs Committee if appropriate. The committee(s) shall review only those amendments submitted by the College, School, or the Library, and shall not conduct a full review of the Plan. Upon approval by the ERG Committee (and the Faculty Affairs Committee, if necessary), the amendments shall be submitted to the College Assembly, the Senate Executive Committee, the Senate, and the President according to the procedures outlined above in section 2 d-f.

4. Until a revised Plan of Organization is approved by the University Senate and President, the version of the Plan of Organization of each College, School, and the Library that was most recently approved by the University Senate and President remains in effect, and provides the rules under which the College, School, or the Library must review and approve future revisions to its Plan. The University Plan of Organization supersedes any provisions in the Plan of any College, School, the Library, Department, or Academic Program that are in conflict with the purpose, applicability, or intent of the University Plan.

Dates of Approval, Updates and Amendments to the Senate Bylaws

Approved, Campus Senate, October 9, 1986
Approved, Board of Regents, February 6, 1987
Updated, July 11, 1988
Amended, February 13, 1986
Amended, December 7, 1986
Amended, May 7, 1990
Amended, September 13, 1990
Amended, November 15, 1990
Amended, October 14, 1993
Amended, December 6, 1993
Amended, March 31, 1994
Amended, April 18, 1994
Amended, May 5, 1994
Amended, November 10, 1994
Amended, August 28, 1996
Amended, May 15, 1997
Amended, March 5, 1998
Amended, April 2, 1998
Amended, April 6, 2000
Amended, February 12, 2001
Amended, September 19, 2002
Amended, February 3, 2003
Amended, October 16, 2003
Amended, April 19, 2004
Amended, April 4, 2005
Amended, May 15, 2007
Amended, May 8, 2008
Amended, October 16, 2008
Amended, February 9, 2009
Amended, May 4, 2009
Amended, November 12, 2009
Amended, March 3, 2010
Amended, February 9, 2011
Amended, May 4, 2011
Amended, March 8, 2012
Amended, April 19, 2012
Amended, May 2, 2013
Amended September 18, 2013
Amended, April 15, 2015
Approved after 2015 Plan of Org Review, May 4, 2015
Amended, November 20, 2015
Amended, December 14, 2015
Amended, February 18, 2016
Amended, March 18, 2016
Amended March 24, 2017
Amended November 8, 2017
Amended May 3, 2019
Amended February 7, 2020
Amended March 30, 2020
Amended November 12, 2020
Amended December 10, 2020
Amended April 9, 2021