



**Cover Sheet for In-State Institutions
New Program or Substantial Modification to Existing Program**

Institution Submitting Proposal	The Johns Hopkins University
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Each action below requires a separate proposal and cover sheet.

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|---|---|
| <input checked="" type="radio"/> New Academic Program | <input type="radio"/> Substantial Change to a Degree Program |
| <input type="radio"/> New Area of Concentration | <input type="radio"/> Substantial Change to an Area of Concentration |
| <input type="radio"/> New Degree Level Approval | <input type="radio"/> Substantial Change to a Certificate Program |
| <input type="radio"/> New Stand-Alone Certificate | <input type="radio"/> Cooperative Degree Program |
| <input type="radio"/> Off Campus Program | <input type="radio"/> Offer Program at Regional Higher Education Center |

Payment <input checked="" type="radio"/> Yes	Payment <input type="radio"/> R*STARS # 12070536	Payment	\$850	Date	12/6/2024
Submitted: <input type="radio"/> No	Type: <input checked="" type="radio"/> Check # 12070536	Amount:		Submitted:	

Department Proposing Program	Krieger School of Arts and Sciences	
Degree Level and Degree Type	Post Baccalaureate Certificate	
Title of Proposed Program	Pre-medicine	
Total Number of Credits	57	
Suggested Codes	HEGIS:	CIP: 51.1102
Program Modality	<input checked="" type="radio"/> On-campus <input type="radio"/> Distance Education (<i>fully online</i>) <input type="radio"/> Both	
Program Resources	<input checked="" type="radio"/> Using Existing Resources <input type="radio"/> Requiring New Resources	
Projected Implementation Date	<input type="radio"/> Fall <input type="radio"/> Spring <input checked="" type="radio"/> Summer Year: 2025	
Provide Link to Most Recent Academic Catalog	URL: https://e-catalogue.jhu.edu/	

Preferred Contact for this Proposal	Name:	Westley Forsythe
	Title:	Academic Compliance Officer
	Phone:	(410) 516-0188
	Email:	wforsythe@jhu.edu

President/Chief Executive	Type Name:	Ray Jayawardhana
	Signature:	<i>Ray Jayawardhana</i> Date: 12/12/2024

	Date of Approval/Endorsement by Governing Board:
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December 13, 2024

Sanjay Rai, PhD
Secretary
Maryland Higher Education Commission
6 N. Liberty Street, 10thFloor
Baltimore, MD 21201

Dear Secretary Rai,

On behalf of Provost Jayawardhana, I write to request your review and endorsement of the enclosed proposal. The university proposes a new **Post Baccalaureate Certificate in Pre-medicine**.

The United States benefits from 238 medical schools educate the next generation of physicians. While many applicants begin medical school preparation early in their undergraduate education, medical schools do not require that prerequisite coursework or experiences be completed during an applicant's undergraduate education. This flexibility allows individuals who discover an interest in the field later – after their baccalaureate education and sometimes after they have begun other careers – to pursue a career in medicine. Post baccalaureate programs of this kind allow individuals to complete the necessary pre-requisite education to render them competitive candidates for medical school.

The proposed program is consistent with the Johns Hopkins mission and the State of Maryland's Plan for Postsecondary Education. The proposal is endorsed by The Johns Hopkins University.

Should you have any questions or need further information, please contact Westley Forsythe at (410) 516-0188 or wforsythe@jhu.edu.

Thank you for your support of Johns Hopkins University.

Sincerely,

A handwritten signature in black ink, appearing to read "Janet Simon Schreck".

Janet Simon Schreck, PhD
Senior Associate Vice Provost for Academic Affairs

cc: Dr. Ray Jayawardhana

Dr. Westley Forsythe

Enclosures

The Johns Hopkins University
Krieger School of Arts and Sciences
Proposal for Post-Baccalaureate Certificate in Post-Baccalaureate Premedical Program

A. Centrality to Institutional Mission Statement and Planning Priorities

1. Provide a description of the program, including each area of concentration (if applicable), and how it relates to the institution’s approved mission.

The United States benefits from 238 medical schools (171 allopathic medical schools¹ and 67 osteopathic medical schools²) who serve as the primary source of the next generation of physicians. While many applicants begin preparation early in their undergraduate education, medical schools do not require that prerequisite coursework or experiences be completed during an applicant’s undergraduate education. This flexibility allows individuals who discover an interest in the field later – after their baccalaureate education and sometimes after they have begun careers in other fields – to still pursue a path to medicine. This flexibility, however, does not negate the necessity of completing prerequisite coursework, standardized tests, extensive experience in the field, and other expected preparation.

Post-baccalaureate programs designed for these “career changers” support these specific students by providing the appropriate coursework along with opportunities for gaining medically relevant experience, exam preparation, and additional mentorship and advising support to be successful candidates in the medical school application process. The **Post-Baccalaureate Premedical Program certificate** is one such program, supporting highly skilled workers from other professions who hope to carry their wealth of experience and a mature perspective to the medical profession.

The Post-Baccalaureate Premedical Program certificate (PBPPC) is for students who have previously earned a bachelor’s degree and requires:

- Full-time enrollment (12 credit minimum) in the fall and spring semesters
- C or better in all premedical courses (see list below) as indicated on individual student schedule (prepared by the program) (minimum 24 approved credits)
- Satisfactory grade in the Introduction to Clinical Medicine course (2 credits)
- Satisfactory grades in the Managing the Medical School Portfolio I & II courses (3 credits)
- Satisfactory grade in one Medical Tutorial course (1 or 2 credits per Tutorial)

Students are expected to complete the certificate in 9-14 months.

The premedical courses align with published medical school prerequisite expectations. Those are:

¹ American Association of Medical Colleges. (2024, Nov 11). “Medical School Admissions Requirements.” AAMC. <https://students-residents.aamc.org/medical-school-admission-requirements/medical-school-admission-requirements-msar-applicants>

² American Association of Colleges of Osteopathic Medicine. (2024, Nov 11). “Choose D.O. Explorer.” AACOM. <https://www.aacom.org/explore-med-schools/choose-do-explorer>

General Biology I & II with 1 year of labs	8 credits
General Chemistry I & II with 1 year of labs	8 credits
General Physics I & II with 1 year of labs	10 credits
Organic Chemistry I & Biochemistry with 1 year of labs	10 credits

Medical schools respond negatively to students retaking premedical courses previously completed successfully. Thus, the “individual student schedule,” is created for each individual student by beginning with the prerequisite course list above and then takes into account courses completed at other colleges prior to enrollment in the PBPPC.

The mission of the Johns Hopkins University is “to educate its students and cultivate their capacity for life-long learning, to foster independent and original research, and to bring the benefits of discovery to the world.” Individuals interested in pursuing a career in medicine are innately curious and must be devoted to life-long learning as biomedical information constantly changes and expands. Through the established coursework and one-on-one guidance with advisors, students are invited to cultivate their skills as students and future leaders and remain engaged in their personal growth while the Medical Tutorials introduce students to independent research, perhaps enticing them to pursue research and “bring the benefits of discovery to the world” in their future medical careers.

2. Explain how the proposed program supports the institution’s strategic goals and provide evidence that affirms it is an institutional priority.

Goal 1: Strengthen the on-campus experience to create more meaningful, engaging, and enticing opportunities for interaction.³

The structure of the PBPPC supports this goal by providing fully on-site coursework and programming. In addition, by having a small cohort of learners take the same courses and sections together, we develop a supportive and cohesive community. The required Introduction to Clinical Medicine course is an in-person seminar dedicated to meaningful conversations about pressing issues in medicine and requires students to engage with the professor, guest speakers, and each other as they tackle difficult questions. This collaborative and supportive community, nested within the larger Hopkins community, contributes positively to building a collaborative and supportive campus culture and serves as a valuable community role model for other students on campus.

Goal 6: Create the preeminent undergraduate experience in a research-intensive university setting by nurturing a learning environment that allows students to connect with our leading faculty and research programs; provides unrivaled mentorship, immersive experiences, and life design; and creates a culture of engagement, community, and belonging that ensures our

³ Johns Hopkins University. (2023, Sep 20). “The Ten for One: A Framework for Building Our University Together.” JHU Office of the President. <https://president.jhu.edu/ten-for-one/>

students can thrive individually and collectively.

The PBPPC immerses students in a research-intensive environment through building laboratory skills. Our students, who enter the program from non-science backgrounds, are able to build foundational laboratory knowledge through their biology, chemistry, and physics coursework and associated laboratory courses. They are able to apply this knowledge immediately and make a meaningful contribution to research through the Medical Tutorial course experience. Through these, each student has a faculty mentor from the Johns Hopkins School of Medicine and participates in cutting-edge research, clinical work, or community engagement under the faculty member's support and direction. This goal affirms the importance of mentorship as part of the student experience, and our program is well-positioned to support students in this area since all students will work with at least one mentor from the School of Medicine, receive tailored academic advising from two dedicated pre-health advisors, and become part of a close-knit cohort and alumni community.

3. Provide a narrative of how the proposed program will be adequately funded for at least the first five years of program implementation.

The revenue generated by the PBPPC contributes to the financial health of the Krieger School of Arts and Sciences (KSAS) and the University. In turn, the KSAS sets aside a portion of its tuition revenue each year to support the budgetary needs of the Post-Baccalaureate Premedical Program Certificate (PBPPC), rendering the program financially sustainable. (See Appendix C for more details.)

4. Provide a description of the institution's commitment to:

(a) Ongoing administrative, financial, and technical support of the proposed program.

Based on the mutually beneficial relationship described in A.3., Johns Hopkins University has made provision to fund the administrative, financial, and technical supported necessary for the success and sustainability of the PBPPC for an indefinite period of time.

(b) Continuation of the program for a period of time sufficient to allow enrolled students to complete the program.

Based on the mutually beneficial relationship described in A.3., Johns Hopkins University has made provision to ensure that students enrolled in the PBPPC will be able to complete the program. This arrangement is aided by the short window of obligation made possible by the certificate's 9-14 month completion time; further, the PBPPC students are entirely enrolled in Johns Hopkins University undergraduate courses, which means that, if the PBPPC were to be suddenly discontinued, the necessary courses would remain available.

B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan

1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State in general.

There has been a long-standing concern about growing shortfalls in the number of physicians within Maryland and in the US originating in a 2009 study conducted by the Association of American Medical Colleges (AAMC) stating that a growing number of the U.S. physician workforce is facing current or future shortages in both primary and specialty care (both in individual states and nationwide)⁴. An updated report was released in 2021⁵ that predicts that “demand continues to exceed projected supply...leading to a projected shortage of between 37,8000 and 124,000 physicians by 2034.”^{6,7} This is an improvement in projected outcomes from the 2009 report; however, the 2021 updated report relies largely on pre-pandemic data. They write, “Previous studies by the AAMC and others projected a growing shortage of physicians, mainly due to a growing and aging population, high prevalence of chronic disease and unhealthy lifestyle, an aging health workforce, and constraints on the number of physicians trained.” “The COVID-19 pandemic exacerbated current shortage in provider supply in some areas, exposing deficiencies in the health care system such as disparities in health outcomes and insufficient numbers of health care workers to respond to the surge in need in key specialties and delivery settings.”^{6,7}

This report further outlines new factors, originating in the COVID-19 pandemic, that are hypothesized to negatively impact the future direction of the physician workforce, for example, long-term burnout, lingering trauma as well as significant early career exits resulting from childcare, economic challenges, burnout/trauma, and death.^{6,7} Taken together, there is overwhelming evidence of continued concern of the long-established (and potentially growing) physician shortage with additional exacerbating factors resulting from the COVID pandemic. In concert with the AAMC’s call for increasing student enrollment in existing institutions⁸, all of the above creates compelling evidence for at least maintenance if not an increase in the more than 22,000 seats available annually in US medical schools⁹.

2. Provide evidence that the perceived need is consistent with the Maryland State Plan for Postsecondary Education.

Student Access: Ensure equitable access to affordable and high-quality post-secondary education for all Maryland residents.

Access to medical education is restricted by completion of the prerequisite coursework and a

⁴ American Association of Medical Colleges. (2009). “2009 State Physician Workforce Data Book: Center for Workforce Studies.” AAMC. <https://www.aamc.org/media/8396/download>

⁵ American Association of Medical Colleges. (2022). “2021 State Physician Workforce Data Report.” AAMC. <https://store.aamc.org/2021-state-physician-workforce-data-report.html>

⁶ American Association of Medical Colleges. (2021). “The Complexities of Physician Supply and Demand: Projections from 2019 to 2034.” AAMC. <https://www.aamc.org/media/54681/download>

⁷ Frogner & Dill. (2022, Apr 8). “Tracking Turnover Among Health Care Workers During the COVID-19 Pandemic: A Cross-sectional Study.” JAMA Health Forum, 3(4). <https://jamanetwork.com/journals/jama-health-forum/fullarticle/2790961>

⁸ Heiser, Stuart. (2019, July 25). “Press Release: U.S. Medical School Enrollment Surpasses Expansion Goal.” American Association of Medical Colleges. <https://www.aamc.org/news/press-releases/us-medical-school-enrollment-surpasses-expansion-goal#:~:text=The%20AAMC%20called%20for%20a,creation%20of%20new%20medical%20schools>.

⁹ American Association of Medical Colleges. (2022). “2022 FACTS: applicants and Matriculant Data, Table A-16-MCAT Scores and GPAs for Applicants and Matriculants to US MD-Granting Medical Schools, 2018-2019 through 2022-2023.” <https://www.aamc.org/media/6056/download?attachment>

standardized test. Standard education practices allow access to these courses during a student's undergraduate education but can be exceedingly difficult to secure once graduated. Career changer post-baccalaureate programs like the PBPPC, however, allow students who did not meet these expectations during their undergraduate education a novel opportunity to access prerequisite coursework. Further, because application to these post-baccalaureate programs is openly available to all students, access to a second chance opportunity to pursue premedical education is transparent and equitably offered.

Student Success: Promote and implement practices and policies that will ensure student success.

The PBPPC leverages Johns Hopkins University's indelible commitment to high-quality education in order to provide unparalleled opportunities for non-science trained professionals to upgrade their skills and retrain in the life sciences in preparation for a medical education and medical career. Through the real-world experiences available via the Medical Tutorial courses (at the JHU School of Medicine), PBPPC candidates participate in cooperative learning opportunities that allow them to apply classroom knowledge to real clinical and research problems while also providing low-risk learning opportunities to explore a potential career in medicine. To ensure timely and obstacle-free certificate completion, the PBPPC is structured to encourage students to complete the certificate in a timely manner (9-14 months), with policies and procedures in support of that outcome. Similarly, the PBPPC offers academic and advising support services that promote classroom success, student retention, certificate completion, and positive workforce outcomes.

Innovation: Foster innovation in all aspects of Maryland higher education to improve access and student success.

As a champion of innovative education, Johns Hopkins University is an ideal setting for the innovative premedical preparation available through the PBPPC. No other post-baccalaureate program (nationally or within the state) offers the robust experiential opportunity offered through the Medical Tutorial course. Further, all PBPPC students will have the opportunity to participate in an unparalleled pre-health advising course, Managing the Medical School Portfolio I and II, that offers a robust, student-focused, and data-driven foundation for future success. Students cultivate a deep understanding not only of the medical school admissions process but also the foundational skills necessary for success in the process. These additional, innovative components of the PBPPC improve the well-being of students during the program and success in the medical school application process, thereby increasing accessibility of a high-quality education at Hopkins and their medical education afterwards.

C. Quantifiable and Reliable Evidence and Documentation of Market Supply and Demand in the Region and State:

1. Describe potential industry or industries, employment opportunities, and expected level of entry (ex: mid-level management) for graduates of the proposed program.

The primary goal of the PBPPC is to prepare students for successful progress into medical school and ultimately to employment as physicians or surgeons. During the existing history

of the program, 96.3% of our graduates are accepted to one or more medical schools within their first application¹⁰, with a significant majority of students applying during the program or at the next possible application cycle entry point following completion of the program.

During the year-long medical school application cycle, students seek temporary employment that leverages the scientific knowledge and skills gained in the program to secure positions.

Positions include:

- K12 education positions – math teacher, science teacher
- Clinical, direct care or administrative positions – medical assistant, medical scribe, emergency department patient registrar, patient navigator, COVID-19 case investigation group supervisor, special projects administrator, ASL medical interpreter, medical interpreter, ophthalmic technician, volunteer coordinator, medical receptionist, medical office administrator
- Research positions – assistant clinical research coordinator, lab assistant, clinical research coordinator, lab manager, research program coordinator, research assistant I, research technologist

2. Present data and analysis projecting market demand and the availability of openings in a job market to be served by the new program.

According to the US Bureau of Labor Statistics, physicians and surgeons are currently expected to experience a modest projected growth of 3% from 2022 to 2032¹¹; however, the anticipated physician shortage reported by the American Association of Medical Colleges (AAMC), as discussed in B.1., suggests a greater need in newly trained physicians entering the field.

3. Discuss and provide evidence of market surveys that clearly provide quantifiable and reliable data on the educational and training needs and the anticipated number of vacancies expected over the next 5 years.

During the existing history of the program, 96.3% of our graduates were accepted to one or more medical schools within their first application¹⁰, with a significant majority of students applying during the program or at the next possible application cycle entry point following completion of the program.

4. Provide data showing the current and projected supply of prospective graduates.

The American Association of Medical Colleges (AAMC) reported a “record setting 17.8% increase” in applying students in the 2021-22 application year¹². Although sources disagree

¹⁰ Cumulative data as of 2023.

¹¹ Bureau of Labor Statistics, US Dept of Labor. (2023, Sept 27.) “Occupational Outlook Handbook, Physicians and Surgeons,” https://www.bls.gov/ooh/healthcare/physicians_and_surgeons.htm

¹² Boyle, Patrick. (2021, Dec 8.) “Medical School Applicants and Enrollments Hit Record Highs; Underrepresented Minorities Lead the Surge.” AAMC News, <https://www.aamc.org/news/medical-school-applicants-and-enrollments-hit-record-highs-underrepresented-minorities-lead-surge>

on the cause(s) of the increase, it's clear that the longstanding nationwide interest in pursuing a career in medicine has only grown in the US. Further, with the 103.4M confirmed cases of COVID-19 nationwide¹³ (as of November 2024) continuing to impact US communities and families, personal health concerns and ongoing systemic healthcare gaps continue to influence the national discourse, which, in turn reinforces that national interest in medicine. Post-baccalaureate programs (like the PBPPC) and undergraduate premedical tracks have and will continue to benefit from the surge already identified by the AAMC for many years to come.

D. Reasonableness of Program Duplication

1. Identify similar programs in the State and/or same geographical area. Discuss similarities and differences between the proposed program and others in the same degree to be awarded.

A similar program in Maryland exists at Goucher College¹⁴. While the intended outcome is the same – preparing students within one year to apply to and enroll in medical school – the structure of the PBPPC is different. Due to its extensive offerings in science courses, Johns Hopkins University is well-positioned to provide more flexibility to students who have some background in the sciences (engineers or nurses, for example) but who may have not completed all the premedical prerequisite coursework. Additionally, Hopkins's affiliated Schools of Medicine, Public Health, and Nursing allow PBPPC students a wealth of experiential opportunities unmatched by the Goucher program. Further, because the Goucher College program enrolls only ~30 students annually, it does not have the capacity to solely meet the needs of all Maryland (or regional/national) prospective students.

2. Provide justification for the proposed program.

The PBPPC fills an important role in the premedical landscape, providing an opportunity for professionals in other disciplines to refocus their knowledge and skills toward a career in medicine. In addition to opening a new avenue of access to the premedical path, it also increases the overall strength and diversity of the medical profession through recruiting students who have already developed robust skills in other fields like engineering, psychology, and business. Further, the PBPPC serves as a leader in premedical education in how to best prepare both post-baccalaureate and undergraduate students for success in medical school. This is demonstrated by our exemplary 96.3% acceptance rate of our graduates to medical school within their first application to medical school¹⁵, which is more than double the national acceptance rate of 43.7%¹⁶.

¹³ World Health Organization, (2024, Nov 11), "WHO Coronavirus (COV-19) Dashboard," World Health Organization, <https://covid19.who.int>

¹⁴ Goucher College Post-Baccalaureate Premed Program, "Post-Baccalaureate Premed Program," Goucher College. <https://www.goucher.edu/learn/graduate-programs/post-baccalaureate-premed-program/>

¹⁵ Cumulative data as of 2023.

¹⁶ American Association of Medical Colleges. (2024.) "2023 FACTS: Applicants and Matriculant Data, Table A-16-MCAT Scores and GPAs for Applicants and Matriculants to US MD-Granting Medical Schools, 2018-2019 through 2023-2024." <https://www.aamc.org/media/6056/download?attachment>

E. Relevance to High-Demand Programs at Historically Black Institutions (HBIs).

- 1. Discuss the program’s potential impact on the implementation or maintenance of high-demand programs at HBIs.**

The PBPPC will not directly affect the implementation or maintenance of high-demand programs at HBIs.

F. Relevance to the identity of Historically Black Institutions (HBIs).

- 1. Discuss the program’s potential impact on the uniqueness and institutional identities and missions of HBIs.**

We do not anticipate that this program having any impact on HBIs’s institutional identities and missions.

G. Adequacy of Curriculum Design and Delivery to Related Learning Outcomes (as outlined in COMAR 13B.02.03.10)

- 1. Describe how the proposed program was established and describe the faculty who will oversee the program.**

In the Krieger School of Arts and Sciences, any academic program is first reviewed and approved by the Vice Dean for Undergraduate Education, then the Homewood Academic Council, followed by the Council of Deans, and finally the Office of the Provost.

The role of the PBPP Leadership is to coordinate seats in the lower division courses per our agreement with the Departments of Biology, Chemistry, and Physics. The table below outlines the (a) leadership team that oversees the day-to-day operations of the Post-Baccalaureate Premedical Program, and the leadership that oversees the program both (b) directly and (c) in an advisory capacity.

(a) Day-to-Day Operations Team			
Name	Title	Degree & field	Role
Alexandra Tan	Director	PhD, Biology	Director & advisor
Megan Bowen	Assistant Director	MT, English Education	Assistant Director & advisor
Jubilee Townsend	Academic Program Coordinator	BS, Mass Communication	Administrative program support
(b) Krieger School of Arts & Science Dean’s Office Leadership over PBPPC			
Erin Rowe	Vice Dean, Undergraduate Education, Krieger School of Arts & Sciences	PhD, History	Dr. Tan directly reports to Vice Dean Rowe
Chris Celenza	James B Knapp Dean, Krieger School of Arts & Science	PhD, History	Vice Dean Rowe reports to Dean Celenza

(c) Post-Bac Program Faculty Advisory Committee			
Trina Schroer	Professor, Dept of Biology	PhD, Biology	Chair of Adv Committee, Member representing Dept of Biology
Chris Falzone	Teaching Professor, Dept of Chemistry	PhD, Chemistry	Member representing Dept of Chemistry
Robert Leheny	Professor & Chair, Dept of Physics	PhD, Physics	Member representing Dept of Physics

2. Describe educational objectives and learning outcomes appropriate to the rigor, breadth and (modality) of the program.

Students who complete the PBPPC will be able to:

- Apply knowledge and skills in the natural sciences to solve problems related to molecular and macro systems including but not limited to molecules, cells, and biochemical pathways.
- Apply knowledge of the scientific process to integrate and synthesize information, solve problems, and formulate research questions and hypotheses.
- Recognize the ethical and professional responsibilities involving health and wellness – in direct patient care, in the local community, in the larger public sphere.
- Understand the role of a physician in patient care and the role of different professions in a medical team.

3. Explain how the institution will: (a) provide for assessment of student achievement of learning outcomes in the program; (b) document student achievement of learning outcomes in the program.

The University uses anonymous surveys to assess the undergraduate and graduate courses, their learning objectives, and affiliated faculty. In addition, the PBPPC will use Qualtrics surveys during the fall and spring to assess students experience in the program and their perceived learning outcomes. Additionally, we will assess student success data as compared to historical program student data to drive adaptation of advising services, student support services, and student success resources. Finally, student success will be determined by accessing acceptance rates to medical schools as compared to data for other Johns Hopkins applicants and national acceptance rates.

4. Provide a list of courses with title, semester credit hours and course descriptions, along with a description of program requirements.

A full course listing, with course titles, credits, and descriptions is provided in Appendix A.

5. Discuss how general education requirements will be met, if applicable.

Not applicable.

6. Identify any specialized accreditation or graduate certification requirements for this program and its students.

Not applicable.

7. If contracting with another institution or non-collegiate organization, provide a copy of the written contract.

Not applicable.

8. Provide assurance and any appropriate evidence that the proposed program will provide students with clear, complete, and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements, learning management system, availability of academic support services and financial aid resources, and cost and payment policies.

Curriculum, Course, and Certificate Requirements

Prior to enrollment, all entering students will receive a schedule outlining the courses they will need to complete at Johns Hopkins University in order to receive the certificate. The template schedule is openly accessible on the Program’s website and is only altered when students have previously completed the required courses and if additional elective courses must be added to ensure full-time status (more than 12-credits during the fall and spring semesters). These certificate requirements will also be communicated in the student handbook, which will explicitly outline the conditions of receiving the certificate.

Other Type of Information Communicated	Where clear, complete, and timely information will be provided to students
Nature of faculty/student interaction	Website, information sessions, may be discussed during interviews, may be discussed with current student/alumni contacts post-interview (given to all interviewing students), orientation discussion, bootcamp discussion, experienced in classes
Nature of advisor/student interaction	Website, information sessions, exemplified by interview with advisor, may be discussed with student contacts post-interview (given to all interviewing students), outlined in student handbook, disclosed in advising seminars schedule, discussed during orientation, experienced during individual advising appointments, experienced during advising semester
Technical standards/ LMS	Website, pre-orientation communication with students to gain access prior to orientation and bootcamps; the University offers training services for students who need additional support with Canvas (ctei.jhu.edu)
Academic support services	Website, information sessions, may be discussed during interviews, may be discussed with current student/alumni contacts post-interview (given to all interviewing students), orientation discussion, advising seminar discussion, may be discussed during individual advising appointments
Financial aid resources & Cost and payment policies	Website, interviewing students are referred to Financial Aid office/Student Accounts office, student handbook, discussion during orientation, students with questions during advising

	appointments or during advising seminar are referred to appropriate office for support
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9. Provide assurance and any appropriate evidence of advertising, recruiting and admissions materials will clearly and accurately represent the proposed program and the services available.

All advertising, recruiting, and admissions materials require the approval of the Director of the program, will be reviewed annually by the faculty Advisory Board, and will be subject to the rigorous oversight of the academic council of the Krieger School of Arts and Sciences.

H. Adequacy of Articulation

1. If applicable, discuss how the program articulation with programs at partner institutions. Provide all relevant articulation agreements.

Not Applicable

I. Adequacy of Faculty Resources (as outlined in COMAR 13b.02.03.11).

1. Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appropriate type, terminal degree title and field, academic title/rank, status, (fulltime, part-time, adjunct) and the course(s) each faculty member will teach (in this program).

Students in the Post-Baccalaureate Premedical Program enroll in undergraduate premedical courses and graduate courses across multiple departments that serve both undergraduate and post-baccalaureate students. Faculty teaching these courses are decided independently by the responsible departments.

DEPARTMENT OF BIOLOGY				
Name	Degree & field	Academic title/rank	Status	course
Rebecca Pearlman	PhD, Genetics	Senior Lecturer	Full-time	General Biology Laboratory I General Biology Laboratory II
Christov Roberson	PhD, Biology	Lecturer	Full-time	General Biology I General Biology II Biochemistry
Katherine Tift	PhD, Cell Biology	Associate Teaching Professor	Full-time	Biochemistry
Alexandra Tan	PhD, Biology	Senior Lecturer	Full-time	Managing the Medical School Portfolio I Managing the Medical School Portfolio II

David Meyers	MD, Emergency Medicine MBE, Bioethics	Adjunct Instructor	Part-time (fall semester only)	Introduction to Clinical Medicine
DEPARTMENT OF CHEMISTRY				
Sunita Thyagarajan	PhD, Chemistry	Associate Teaching Professor	Full-time	Introduction to Chemistry I Introduction to Chemistry Laboratory I Introduction to Chemistry II
Jamie Young	PhD, Chemistry	Lecturer	Full-time	Introduction to Chemistry Laboratory I Introduction to Chemistry II Introduction to Chemistry Laboratory II
Christopher Falzone	PhD, Chemistry	Teaching Professor	Full-time	Introduction to Organic Chemistry I
Larissa D'Souza	PhD, Chemistry	Senior Lecturer	Full-time	Introductory Organic Chemistry Laboratory
DEPARTMENT OF PHYSICS				
Tobias Marriage	PhD, Physics	Professor	Full-time	General Physics I for Biological Sciences Majors
Reid Mumford	PhD, High Energy Particle Physics	Instructional Resource Advisor	Full-time	General Physics Laboratory I General Physics Laboratory II
Daniel Reich	PhD, Physics	Professor	Full-time	General Physics II for Biological Sciences Majors

Post-Baccalaureate Premedical Program students also participate in 1 or 2 Medical Tutorial graduate courses during the program. These courses are experiential in nature and are hosted by faculty with an established affiliation to the Johns Hopkins School of Medicine.

Panagis Galiatsatos	MD, Internal Medicine	Associate Professor of Medicine	Full-time	Medicine for the Greater Good
Sanjay Jain	MD, Pediatrics	Professor of Pediatrics	Full-time	Molecular Imaging for Infections
Glenn Treisman	MD/PhD, Pharmacology	Professor of Psychiatry & Behavioral Sciences & Internal Medicine	Full-time	Psychiatry in Medical Settings
Shameema Sikder	MD, Ophthalmology	Associate Professor of Ophthalmology	Full-time	AI-Driven Surgical Skill Assessment
Edward McFarland	MD, Orthopedic Surgery	Professor of Orthopedic Surgery	Full-time	Introduction to Orthopedic Surgery
Kimberly Gudzune	MD/MPH, Internal Medicine	Associate Professor of Medicine	Full-time	Obesity & Lifestyle Research

Geoffrey Miller	MS, Medical Education & Leadership	Director of Simulation; Associate Professor of Emergency Medicine	Full-time	Simulation in Medical Education
Sujatha Kannan	MBBS, Medical Education & Research	Professor of Anesthesiology & Critical Care Medicine	Full-time	Nanotherapies for Brain Injuries

2. Demonstrate how the institution will provide ongoing pedagogy training for the faculty in evidenced-based best practices, including training in: (a) Pedagogy that meets the needs of students, (b) The learning management system, and (c) Evidenced-based best practices for distance education, if distance education is offered.

Johns Hopkins University offers extensive training for faculty and graduate instructors through the Center for Teaching Excellence and Innovation. All postdoctoral fellows will meet for annual training with the Center’s teacher support specialist and will undergo classroom observation and feedback sessions to receive input from experienced teachers about pedagogy that align with our students’ needs. All faculty have the opportunity to attend regular supplementary workshops for the learning management system for the Krieger School of Arts and Sciences.

J. Adequacy of Library Resources (as outlined in COMAR 13B.02.03.12)

1. Describe the library resources available and/or measures to be taken to ensure resources are adequate to support the proposed program. If the program is to be implemented within existing institutional resources, include a supportive statement by the Present for library resources to meet the program’s needs.

Students will have access to the Milton S. Eisenhower Library on the Homewood campus, which is ranked as one of the nation’s foremost facilities for research and scholarship. Its collection of more than 3.7 million books, 900,000 e-books, several million microfilms, and more than 171,000 print and e-journals has been assembled to support the academic efforts of the University. The interlibrary loan department makes the research collection of the nation available to faculty and students. The library also provides easy access to a wide selection of electronic information resources, including the libraries online catalog, and numerous electronic abstracting and indexing tools. Many of the databases are accessible remotely. Librarians help students electronically and the library maintains an extensive website to take visitors through all its services and materials.

K. Adequacy of Physical Facilities, Infrastructure and Instructional Equipment (as outlined in COMAR 13B.02.03.13).

1. Provide an assurance that physical facilities, infrastructure, and instruction equipment are adequate to initiate the program, particularly as related to spaces for classrooms, staff and faculty offices, and laboratories for studies in the technologies and sciences. If the program is to be implemented within existing institutional

resources, include a supportive statement by the President for adequate equipment and facilities to meet the program's needs.

The University has allocated appropriate physical space for the offices of the director, assistant director, and program coordinator. The courses are taught by the appropriate departments using the University's existing classroom space. No additional facilities will be required beyond what is already in use.

2. Provide assurance and any appropriate evidence that the institution will ensure students enrolled in and faculty teaching in distance education will have adequate access to: (a) an institutional electronic mailing system, and (b) a learning management system that provides the necessary technological support for distance education.

The PBPPC will not be offered via distance education.

L. Adequacy of Financial Resources with Documentation (as outlined in COMAR 13B.02.03.14)

The revenue generated by the PBPPC contributes to the financial health of KSAS and the University. In turn, the Krieger School of Arts and Sciences (KSAS) sets aside a portion of its tuition revenue each year to support the budgetary needs of the Post-Baccalaureate Premedical Program Certificate (PBPPC), rendering the program financially sustainable.

M. Adequacy of Provisions for Evaluation of Program (as Outlined in COMAR 13B.02.03.15)

1. Discuss procedures for evaluating courses, faculty and student learning outcomes.

The learning outcomes outlines for each of the medical prerequisite courses and their faculty are assessed by mechanisms established by and within the departments hosting those course and faculty. Separately, student perception of the courses and faculty are assessed externally from the departments and anonymously by Hopkins, with information being provided directly to the departments. Separately, twice a year, the PBPP assesses student experience at Hopkins, access to and utilization of student success resources, feedback on faculty and courses, and achievement of specific culture goals, for example, that all students feel welcome and valued in the program and in the classroom. Success of all learning and student support outcomes are also assessed by collecting data from the medical school admissions success of our students.

2. Explain how the institution will evaluate the proposed program's educational effectiveness, including assessments of student learning outcomes, student retention, student and faculty satisfaction, and cost effectiveness.

All degree programs, non-degree programs, and courses in the Krieger School of Arts and Sciences (KSAS) are subject to a rigorous periodic review by the Homewood Academic

Council, an elected body of senior faculty who consider its learning outcomes, student and faculty satisfaction, retention rates, curricular expectations, and administrative structure. The PBPPC's day-to-day effectiveness is also vigilantly reviewed by KSAS leadership through ongoing mechanisms including annual budget reviews, annual programmatic reviews, and monthly meetings with supervisors.

N. Consistency with the State's Minority Student Achievement Goals (as outlined in COMAR13B.02.03.05).

1. Discuss how the proposed addresses minority student access & success, and the institution's cultural diversity goals and initiatives.

In 2020 Report of its Second Commission on Undergraduate Education, Johns Hopkins committed to "significantly increase the diversity of its undergraduate student body so that, within five years, Johns Hopkins is in the top decile of its peer group in the enrollment of under-represented ethnic minority students." Because the PBPPC creates a non-traditional path to medical school, it increases the opportunities for all students, including minority students, to pursue higher education and career advancement, even later in life. All students that meet admissions requirements are encouraged to apply. Additionally, our small cohort model allows advisors to work individually with students to ensure that all students get the support, within and outside of the classroom, necessary for success in the program. This includes students who possess additional gaps in knowledge and experience both related to and not related to minority identities.

O. Relationship to Low Productivity Programs Identified by the Commission:

1. If the proposed program is directly related to an identified low productivity program, discuss how the fiscal resources (including faculty, administration, library resources, and general operating expenses) may be redistributed to this program.

Not applicable.

P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)

1. Provide affirmation and any appropriate evidence that the institution is eligible to provide Distance Education.

The PBPPC will not be offered via distance education.

2. Provide assurance and any appropriate evidence that the institution complies with C-RAC guidelines, particularly as it relates to the proposed program.

The PBPPC will not be offered via distance education.

Appendix A

Course List and Descriptions

All courses are taken during full-time enrollment in the Krieger School of Arts and Sciences. The core requirements of the program consist of the following premedical requirements, which are stipulated for medical school admissions committees by the majority of US medical schools. All the below courses are existing offerings; no new courses will need to be created.

CHEMISTRY DEPARTMENT COURSES

#030.101 Introductory Chemistry I, 3 credits

An introduction to the fundamental principles of chemistry. The main topics to be covered are atomic and molecular structure at the level of dot structures and VSEPR geometries, the periodic table, stoichiometry and the balancing of chemical equations, the gas laws, the law of mass action and chemical equilibrium, acids and bases, and elementary chemical thermodynamics.

#030.102 Introductory Chemistry II, 3 credits

The fundamental principles of chemistry, including atomic and molecular structure, bonding, elementary thermodynamics, equilibrium, acids and bases, electrochemistry, kinetics, and transition metal chemistry are introduced in this course.

#030.105 Introductory Chemistry I Laboratory, 1 credit

Laboratory in the fundamental methods of chemistry with related calculations.

#030.106 Introductory Chemistry II Laboratory, 1 credit

Laboratory work includes some quantitative analysis and the measurement of physical properties.

#030.205 Introductory Organic Chemistry I, 4 credits

Concepts taught include bonding, molecular orbital theory, valence bond theory, hybridization, Lewis acids and bases, isomers, functional groups and their reactivity, organic reaction mechanisms, electrophiles, nucleophiles, electrophilic addition reactions, nucleophilic substitutions, elimination reactions, stereochemistry, and aromaticity. The chemistry of alkenes, alkynes, alkyl halides, dienes, aromatic molecules, alcohols, and ethers is covered. This course provides an introduction to the fundamental chemistry of carbon compounds. Topics include interrelationships of structure, physical properties, synthesis, and reactions and their mechanisms as well as a brief overview of bio-organic chemistry.

#020.305 Biochemistry, 3 credits

The molecules responsible for the life processes of animals, plants, and microbes will be examined. The structures, biosynthesis, degradation, and interconversion of the major cellular constituents including carbohydrates, lipids, proteins, and nucleic acids will illustrate the similarity of the biomolecules and metabolic processes involved in diverse forms of life.

#030.225 Organic Chemistry Laboratory, 3 credits

Techniques for the organic chemistry laboratory including methods of purification, isolation, synthesis, and analysis.

BIOLOGY DEPARTMENT COURSES

#020.151 General Biology I, 3 credits

This course begins with an overview of the biosphere, followed by analysis of ecosystem and exploration of animal behavior in the context of ecosystems and evolution. Next, the cellular and molecular basis of life and the energetics of organisms are presented as unifying themes. The biochemistry of organic molecules, factors controlling gene expression, cellular metabolism, and advances in biotechnology represent topics of concentration. Mechanisms of inheritance and evolution are introduced. This course will also include a series of workshops that will explore current trends in research, experimental design and analysis, and molecular modeling.

#020.153 General Biology I Laboratory, 1 credit

Laboratory exercises explore subjects ranging from forest ecology to molecular biology to animal behavior. Students participate in a semester-long project, identifying bacteria using DNA sequencing.

#020.152 General Biology II, 3 credits

This course builds on the concepts presented and discussed in General Biology I. The primary foci of this course will be on the diversity of life and on the anatomy, physiology, and evolution of plants and animals. There will be a special emphasis on human biology.

#020.154 General Biology II Laboratory, 1 credit

Laboratory exercises explore subjects ranging from evolution to anatomy and physiology. Students participate in a project using molecular biology techniques to determine whether specific foods are made from genetically engineered plants.

#020.350 Introduction to Clinical Medicine, 2 credits

The purpose of the course is to introduce students to aspects of health care, medicine, and medical practice that contribute to the physician's understanding of the larger context in which medicine is practiced. It is not a course that will teach you skills of history-taking and physical examination; instead, the aim is to provide students with contact with experts in ethics, decision-making, social determinants of health, the patient experience, death and dying, integrative medicine, spirituality and belief and other subjects that exert important influences over the professional lives of doctors.

#020.517 Managing the Medical School Portfolio I, 0 credits

This is the first semester of a year-long course that leads students through a series of topics and exercises designed to understand medical school expectations, develop a strategic plan, cultivate relevant skills/characteristics, and ultimately prepare a successful journey to medical school.

#020.518 Managing the Medical School Portfolio II, 3 credits

This is the second semester of a year-long course that leads students through a series of topics and exercises designed to understand medical school expectations, develop a strategic plan,

cultivate relevant skills/characteristics, and ultimately prepare a successful journey to medical school.

PHYSICS DEPARTMENT COURSES

#171.103 Physics I, 4 credits

Standard calculus-based physics tailored to students majoring in one of the biological sciences. Topics in modern physics and in fluid dynamics will be covered in this course.

#171.104 Physics II, 4 credits

General physics covering mechanics, heat, sound, electricity and magnetism, optics, and atomic physics.

#173.111 General Physics I Laboratory, 1 credit

Experiments are chosen from both physical and biological sciences and are designed to give students background in experimental techniques as well as to reinforce physical principles.

#173.112 General Physics II Laboratory, 1 credit

Experiments are chosen from both physical and biological sciences and are designed to give students background in experimental techniques as well as to reinforce physical principles.

MEDICAL TUTORIALS COURSES

#990.500 Medicine for the Greater Good, 2 credits

Students will learn about community engagement while implementing several projects through Baltimore City focused on health equity and population health. Students will receive clinical shadowing experience as well as engagement mentorship.

#990.504 Molecular Imaging for Infection, 2 credits

Students will learn about the pathogenesis of infections and molecular imaging approaches that can help with understanding pathogenesis, advance the development of novel therapeutics and precision medicine tools.

#990.508 Psychiatry in Medical Setting, 2 credits

Through this course, students will begin to understand the complex interactions between psychiatry and medicine. Students will cultivate their understanding of the field by attending clinic, participating in patient interviews, and reading didactic material as well as observing patient evaluations and individual discussions with the faculty about different ways of understanding disorders.

#990.513 AI-Driven Surgical Skill Assessment, 2 credits

Students will participate in research focuses on AI assisted assessment of cataract surgery videos. CS background helpful, but not mandatory. Students will also be able to cultivate clinic opportunities during the rotations.

#990.514 Introduction to Orthopedic Surgery, 2 credits

In this course, students will be exposed to clinic evaluations and both medical and surgical treatments of common orthopedic ailments to the upper extremities. They will also obtain an understanding of musculoskeletal conditions which cause pain and to know the difference between pain which does and does not indicate a more serious condition. Students will also have an opportunity to assist with research projects on the same topic.

#990.509 Obesity and Lifestyle Research, 2 credits

In this class, students will participate in obesity and lifestyle research teams, including recruitment, consent, enrollment, and data collection with registry participants. Students will develop a research question and work with the research team to answer this question through standard research practices. Students will also have an opportunity to shadow clinical care in an outpatient obesity medicine practice.

#990.511 Simulation in Medical Education, 2 credits

This course will examine the use of medical simulation as a tool of the modern health professions educator. Students will explore the key features of simulation-based healthcare education that lead to effective learning, evaluate the range of simulation methodologies, and critically review current research and trends in simulation-based education, assessment, and research. Participants will participate in practical simulation-based teaching and/or assessment activities during the course.

#990.515 Nanotherapies for Brain Injuries, 2 credits

In this course, students will have the opportunity to learn about neurodevelopmental disorders and pediatric brain injury. They will learn the pathophysiology behind these disorders and how inflammation in the brain can impair normal brain development. They will also have the opportunity to correlate these with patients by attending relevant conferences.

Appendix B

Faculty

Students in the Post-Baccalaureate Premedical Program enroll in undergraduate premedical courses across multiple departments that serve both undergraduate and post-baccalaureate students. Faculty teaching these courses are decided independently by the responsible departments.

DEPARTMENT OF BIOLOGY				
Name	Degree & field	Academic title/rank	Status	course
Rebecca Pearlman	PhD, Genetics	Senior Lecturer	Full-time	General Biology Laboratory I General Biology Laboratory II
Christov Roberson	PhD, Biology	Lecturer	Full-time	General Biology I General Biology II Biochemistry
Katherine Tift	PhD, Cell Biology	Associate Teaching Professor	Full-time	Biochemistry
Alexandra Tan	PhD, Biology	Senior Lecturer	Full-time	Managing the Medical School Portfolio I Managing the Medical School Portfolio II
David Meyers	MD, Emergency Medicine MBE, Bioethics	Adjunct Instructor	Part-time (fall semester only)	Introduction to Clinical Medicine
DEPARTMENT OF CHEMISTRY				
Sunita Thyagarajan	PhD, Chemistry	Associate Teaching Professor	Full-time	Introduction to Chemistry I Introduction to Chemistry Laboratory I Introduction to Chemistry II
Jamie Young	PhD, Chemistry	Lecturer	Full-time	Introduction to Chemistry Laboratory I Introduction to Chemistry II Introduction to Chemistry Laboratory II
Christopher Falzone	PhD, Chemistry	Teaching Professor	Full-time	Introduction to Organic Chemistry I
Larissa D'Souza	PhD, Chemistry	Senior Lecturer	Full-time	Introductory Organic Chemistry Laboratory
DEPARTMENT OF PHYSICS				
Tobias Marriage	PhD, Physics	Professor	Full-time	General Physics I for Biological Sciences Majors
Reid Mumford	PhD, High Energy	Instructional Resource Advisor	Full-time	General Physics Laboratory I General Physics Laboratory II

	Particle Physics			
Daniel Reich	PhD, Physics	Professor	Full-time	General Physics II for Biological Sciences Majors

Post-Baccalaureate Premedical Program students also participate in 1 or 2 Medical Tutorial courses during the program. These courses are experiential in nature and are hosted by faculty with an established affiliation to the Johns Hopkins School of Medicine.

Panagis Galiatsatos	MD, Internal Medicine	Associate Professor of Medicine	Full-time	Medicine for the Greater Good
Sanjay Jain	MD, Pediatrics	Professor of Pediatrics	Full-time	Molecular Imaging for Infections
Glenn Treisman	MD/PhD, Pharmacology	Professor of Psychiatry & Behavioral Sciences & Internal Medicine	Full-time	Psychiatry in Medical Settings
Shameema Sikder	MD, Ophthalmology	Associate Professor of Ophthalmology	Full-time	AI-Driven Surgical Skill Assessment
Edward McFarland	MD, Orthopedic Surgery	Professor of Orthopedic Surgery	Full-time	Introduction to Orthopedic Surgery
Kimberly Gudzone	MD/MPH, Internal Medicine	Associate Professor of Medicine	Full-time	Obesity & Lifestyle Research
Geoffrey Miller	MS, Medical Education & Leadership	Director of Simulation; Associate Professor of Emergency Medicine	Full-time	Simulation in Medical Education
Sujatha Kannan	MBBS, Medical Education & Research	Professor of Anesthesiology & Critical Care Medicine	Full-time	Nanotherapies for Brain Injuries

Appendix C

Financial Resources and Expenditures

Projected student enrollment and the resulting tuition is the source of program revenue. We expect to enroll 30 students annually, with all students completing the program within 9-14 months. “Reallocated Funds” comes from the operating budget provided by the Krieger School of Arts and Sciences, which comes in part by PBPPC revenue from prior tuition, rendering the program financially sustainable.

TABLE 1: RESOURCES

Resources Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
1. Reallocated Funds¹	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
2. Tuition/Fee Revenue²	\$1,462,320	\$1,506,000	\$1,551,000	\$1,597,350	\$1,645,110
a. Annual FT Revenue of New Students					
Number of Full-time Students	30	30	30	30	30
Annual Tuition Rate	\$48,544	\$50,000	\$51,500	\$53,045	\$54,637
Subtotal Tuition	\$1,456,320	\$1,500,000	\$1,545,000	\$1,591,350	\$1,639,110
Annual Fees	\$200	\$200	\$200	\$200	\$200
Subtotal Fees	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
Total Full-time Revenue of New Students	\$1,462,320	\$1,506,000	\$1,551,000	\$1,597,350	\$1,645,110
b. Annual Part-time Revenue					
Number of Part-Time Students	0	0	0	0	0
Credit Hour Tuition Rate	\$0	\$0	\$0	\$0	\$0
Annual Fees Per Credit Hour	\$0	\$0	\$0	\$0	\$0
Annual Credit Hours Per Student	0	0	0	0	0
Subtotal Tuition	\$0	\$0	\$0	\$0	\$0
Subtotal Fees	\$0	\$0	\$0	\$0	\$0
Total Part Time Revenue	\$0	\$0	\$0	\$0	\$0
3. Grants, Contracts & Other Sources	\$0	\$0	\$0	\$0	\$0
4. Other Sources	\$0	\$0	\$0	\$0	\$0
TOTAL (Add 1 - 4)	\$1,512,320	\$1,556,000	\$1,601,000	\$1,647,350	\$1,695,110

1. Reallocated Funds – This is the annual operating budget that the Krieger School of Arts and Science is committed to supplying to the Post-Baccalaureate Premedical Program.
2. Tuition Fee Revenue – This is the sum of the anticipated annual tuition paid by all enrolled students for their fall and spring courses plus the one-time \$200 nonrefundable fee.

TABLE 2: EXPENDITURES

Expenditure Categories	(Year 1)	(Year 2)	(Year 3)	(Year 4)	(Year 5)
1. Total Faculty Expenses³	\$173,295	\$178,494	\$183,849	\$189,364	\$195,046
(b + c below)					
a. #FTE	1.0	1.0	1.0	1.0	1.0
b. Total Salary	\$130,297	\$134,206	\$138,232	\$142,379	\$146,651
c. Total Benefits	\$42,998	\$44,288	\$45,617	\$46,985	\$48,395
2. Total Administrative Staff Expenses³	\$89,856	\$92,551	\$95,328	\$98,187	\$101,133
(b + c below)					
a. #FTE	0.88	0.88	0.88	0.88	0.88
b. Total Salary	\$65,113	\$67,066	\$69,078	\$71,150	\$73,285
c. Total Benefits	\$24,743	\$25,485	\$26,250	\$27,037	\$27,848
3. Total Support Staff Expenses³	\$57,213	\$58,930	\$60,698	\$62,520	\$64,395
(b + c below)					
a. #FTE	0.75	0.75	0.75	0.75	0.75
b. Total Salary	\$41,459	\$42,703	\$43,984	\$45,304	\$46,663
c. Total Benefits	\$15,754	\$16,227	\$16,714	\$17,216	\$17,732
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	\$0	\$0	\$0	\$0	\$0
TOTAL (1-7)	\$320,364	\$329,975	\$339,874	\$350,071	\$360,574

3. Total Faculty and Staff Expenses – As described in G.1., the PBPPC requires one full-time faculty and two staff (one administrative and one support staff). Because PBPPC students are enrolled in existing undergraduate courses, no additional faculty are necessary.