

**From:** [Vincent, Leslie H.](#)  
**To:** [Harmon, Camille](#); [Beattie, Ruth E.](#); [Brothers, Sheila C.](#)  
**Cc:** [Ett-Mims, Joanie](#); [Cramer, Aaron M.](#); [Woolery, Stephanie L.](#)  
**Subject:** Proposed New Undergraduate Certificate in Pre-Medicine  
**Date:** Monday, November 23, 2020 9:28:22 AM  
**Attachments:** [Post bacc UG certificate in Pre-Medicine-new \(revised 11-17-20\).pdf](#)

---

Sheila,

The proposal for the new undergraduate certificate in Pre-Medicine is now ready for review at Senate Council.

### **Proposed New Undergraduate Certificate in Pre-Medicine**

This is a recommendation that the University Senate approve a new undergraduate certificate in Pre-Medicine in the College of Arts and Sciences.

#### **Rationale:**

The Post-Baccalaureate Undergraduate Certificate in Pre-Medicine is a cross-disciplinary 51 credit-hour certificate program that is designed to prepare students to for Medical School. The University of Kentucky currently offers several undergraduate degrees that prepare students for the Medical College Admission Test (MCAT). However, the University of Kentucky does not currently offer a post-baccalaureate undergraduate program for students who wish to pursue a career in medicine and this certificate will address this need. In particular, the target audience for this certificate will be students who have earned a bachelor's degree and wish to change their career path to medicine. By taking coursework across disciplines, students will develop the knowledge and skills required for success on the medical college admission test (MCAT) and in the medical profession. Students admitted in the certificate program must also be admitted to the University of Kentucky as a Post-baccalaureate student, with an awarded undergraduate degree from an accredited college or university and a minimum 3.5 undergraduate cumulative GPA. Admission into the program does not guarantee admission into medical school. Students must still apply for medical school through the normal application process. Expected enrollment in the certificate will be 10 students in Year 1 and is expected to grow to a steady state of 20 students.

Best,  
Leslie

### **Leslie H. Vincent, PhD**

Department of Marketing & Supply Chain  
Gatton College of Business & Economics  
University of Kentucky  
[leslie.vincent@uky.edu](mailto:leslie.vincent@uky.edu)

## NEW UNDERGRADUATE CERTIFICATE

**Certificate Description.** An Undergraduate Certificate is an integrated group of courses (as defined here 12 or more credits) that are 1) cross-disciplinary, but with a thematic consistency, and 2) form a distinctive complement to a student's major and degree program, or 3) leads to the acquisition of a defined set of skills or expertise that will enhance the success of the student upon graduation. Undergraduate Certificates meet a clearly defined educational need of a constituency group, such as continuing education or accreditation for a particular profession; provide a basic competency in an emerging area within a discipline or across disciplines; or respond to a specific state mandate.

**Approval process.** Once approved at the college level, your college will send the proposal to the appropriate Senate academic council (possibly HCCC and/or UC) for review and approval. Once approved at the academic council level, the academic council will send your proposal to the Senate Council office for additional review via a committee and then to the SC and University Senate. (The contact person listed on the form will be informed when the proposal has been sent to committee and other times as appropriate.) The last step in the process is Senate approval; upon Senate approval, students can enroll in the new certificate.

Please click [here](#) for more information about undergraduate certificates.

1. GENERAL INFORMATION			
1a	Home college: Arts and Sciences		
1b	Home educational unit (department, school, college <sup>1</sup> ): <i>Arts and Sciences</i>		
1c	Office of Strategic Planning and Institutional Effectiveness (OSPIE) (Please contact OSPIE ( <a href="mailto:OSPIE@L.uky.edu">OSPIE@L.uky.edu</a> ) for help with questions in this section.)		
	Date of contact with OSPIE: 01/08/19		
	<input checked="" type="checkbox"/> Appended to the end of this form is a PDF of the reply from OSPIE.		
	<input checked="" type="checkbox"/> Appended to the end of this form is a letter(s) of administrative feasibility from the dean(s) of the college(s) offering the certificate.		
	CIP Code (confirmed by OSPIE): 51.1102		
1d	Proposed certificate name:	<i>Post-baccalaureate Undergraduate Certificate in Pre-Medicine</i>	
1e	Requested effective date:	<input type="checkbox"/> Fall semester following approval.	OR <input checked="" type="checkbox"/> Specific Date <sup>2</sup> : <i>Fall 2019</i>
1f	Contact person name: <i>Ruth Beattie</i>	Email: <i>rebeat1@uky.edu</i>	Phone: <i>8593239925</i>
2. OVERVIEW			
2a	Provide a brief description of the proposed new undergraduate certificate. (300 word limit)		
	<i>The Post-Baccalaureate Undergraduate Certificate in Pre-Medicine is a cross-disciplinary certificate program that better prepares students to enter Medical School. The University of Kentucky currently offers several undergraduate degrees that prepare students for the Medical College Admission Test (MCAT). However, the</i>		

<sup>1</sup> Only cross-disciplinary certificates may be homed at the college level.

<sup>2</sup> Certificates are typically made effective for the semester following approval. No program will be made effective unless all approvals, up through and including University Senate approval, are received.

**NEW UNDERGRADUATE CERTIFICATE**

<p><i>University of Kentucky does not offer a post-baccalaureate undergraduate program for students who wish to pursue a career in medicine. The Post-Baccalaureate Undergraduate Certificate in Pre-Medicine will be of interest to students who have earned a bachelor’s degree and wish to change their career path to medicine. By taking coursework across disciplines, students will develop the knowledge and skills required for success on the medical college admission test (MCAT) and in the medical profession.</i></p> <p><i>According to the Association of American Medical Colleges (AAMC), over 15% of the individuals who apply for medical school have completed some form of post-baccalaureate pre-medical program. Typically, these programs fall into two basic categories:</i></p> <p><i>1) Programs for students who have completed the pre-med curriculum but want to improve their GPA and increase their competitiveness; and</i></p> <p><i>2) Programs for students who have completed an undergraduate degree and wish to change their career path and enter medical school, but who haven’t completed the pre-med curriculum.</i></p> <p><i>The proposed Post-Baccalaureate Undergraduate Certificate in Pre-Medicine focuses on the students in this latter category.</i></p> <p><i>The goal of the certificate program is to provide high quality accelerated pre-medical preparation for post-baccalaureate students wishing to enter medical school. This full-time program will only be open to post-baccalaureate students and is intended for those who wish to change their career path to medicine and have not yet completed the pre-medical coursework. This program will be marketed under the name PREP4MD.</i></p>	
2b	<p>This proposed undergraduate certificate (check all that apply):</p> <p><input checked="" type="checkbox"/> Is cross-disciplinary<sup>3</sup>.</p> <p><input type="checkbox"/> Is certified by a professional or accredited organization/governmental agency.</p> <p><input type="checkbox"/> Clearly leads to advanced specialization in a field.</p>
2c	<p><b>Affiliation.</b> Is the undergraduate certificate affiliated with a degree program? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>If “yes,” include a brief statement of how it will complement the program. If it is not affiliated with a degree program, incorporate a statement as to how it will provide an opportunity for a student to gain knowledge or skills not already available at UK. (300 word limit)</p>
2d	<p><b>Duplication.</b> Are there similar regional or national offerings? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If “Yes,” explain how the proposed certificate will or will not compete with similar regional or national offerings.</p> <p><b>According to the <i>burning glass</i>, there are approximately 36 post-baccalaureate pre-medical programs in the U.S. that use the CIP code 54.1102. Only one such program existed in the Commonwealth of Kentucky (University of Louisville). The post-baccalaureate pre-med program at the University of Louisville was small (by national standards) - it served 8 - 12 students each year and was directed only at students who intended to attend the medical school at the University of Louisville. Due to budgetary issues, this program has been phased out. As a result, the proposed certificate program at the University of Kentucky will be the only program of this type in the state.</b></p> <p><b>See benchmark data on attached memo.</b></p>
2d	<p><b>Rationale and Demand.</b> Explain the need for the new undergraduate certificate (e.g. market demand and cross-disciplinary considerations). (300 word limit)</p> <p><i>The University of Kentucky offers a range of undergraduate majors that prepare students for admission into</i></p>

<sup>3</sup> An undergraduate certificate must be cross-disciplinary and students must take courses in at least two disciplines, with a minimum of three credits to be completed in a second discipline.

**NEW UNDERGRADUATE CERTIFICATE**

*Medical School. The university does not, however, offer a postbaccalaureate program for students who have earned an undergraduate degree and wish to change their career plans and enter medical school. These students must complete undergraduate coursework to prepare for the MCAT. Currently, there are 38 postbaccalaureate students enrolled at UK who are completing pre-medical requirements. Of this number, 24 are eligible to apply for this certificate program (based on # of pre-requisite courses still needed). The program will fill an important need for Kentucky residents who wish to pursue a career in medicine. This program addresses Strategic Initiative 2 of the UK Strategic Plan 2015-2020: Strategic Initiative 2: Enhance students' learning and their preparation for contributing to a rapidly changing world as leaders and scholars through the provision of new and innovative curricular offerings and state-of-the-art teaching.*

*Action Step 2: Building on the foundation of existing programs and on UK's strengths, identify and develop new undergraduate programs (including certificates, dual degrees, multidisciplinary and trans-disciplinary offerings) that broaden student preparation and prepare students to be leaders and scholars in a diverse, global society.*

*This program will provide participants with tangible evidence of their motivation and rigorous preparation for a career in medicine. Pre-medicine Posbaccalaureate programs prepare students well for the competitive medical school admissions process.*

*This postbaccalaureate undergraduate certificate program is modelled on similar programs offered nationwide. The MCAT curriculum consists of undergraduate coursework, primarily at the 100- and 200- level, and so this program is being submitted as an undergraduate certificate as the coursework doesn't fit the criteria for a graduate certificate.*

2e **Target audience.** Check the box(es) that apply to the target student population.

Currently enrolled undergraduate students.

Post-baccalaureate students.

2f Describe the demographics of the intended audience. (150 word limit)

*Our target audience will be post-baccalaureate students. This demographic may include recent graduates and non-traditional students who are looking to start a new career in medicine. The Post-Baccalaureate Undergraduate Certificate in Pre-Medicine will be of interest to students who have earned a bachelor's degree and wish to change their career path, but who have not yet completed all of the pre-medical curriculum.*

2g **Projected enrollment.** What are the enrollment projections for the first three years?

	Year 1	Year 2 (Yr. 1 continuing + new entering)	Year 3 (Year 2 continuing + new entering)
Number of Students	10	20	20

2h **Distance learning (DL).** Initially, will any portion of the undergraduate certificate be offered via DL?

Yes  No

If "Yes," please indicate below the percentage of the certificate that will be offered via DL.

1% - 24%       25% - 49%       50% - 74%       75 - 99%       100%

If "Yes," describe the DL course(s) in detail, including the number of required DL courses. (200 word limit)

**NEW UNDERGRADUATE CERTIFICATE**

<b>3. ADMINISTRATION AND RESOURCES</b>											
<b>3a</b>	<p><b>Administration.</b> Describe how the proposed undergraduate certificate will be administered, including admissions, student advising, retention, etc. <i>(150 word limit)</i></p> <p><i>The Post-Baccalaureate Undergraduate Certificate in Pre-Medicine will be administered by the certificate director who will be appointed by the dean of the College of Arts and Sciences in consultation with the faculty of record. This certificate program will be open to all post-baccalaureate students enrolled at the University of Kentucky who have met the certificate prerequisite requirements and have not already completed all of the pre-medical curriculum. Students will be advised by College of Arts and Sciences Pre-Health Professions professional advisors. The certificate director, along with the professional advisors, will monitor the students' progress in the certificate program. The College of Arts and Sciences will ensure that students are receiving opportunities for internships, experiential learning, and pre-med career advising.</i></p> <p><i>Please see attached memo for examples of co-curricular activities.</i></p>										
<b>3b</b>	<p><b>Faculty of Record.</b> The Faculty of Record consists of the undergraduate certificate director and other faculty who will be responsible for planning and participating in the certificate program. Describe the process for identifying the certificate director. Regarding membership, include the aspects below. <i>(150 word limit)</i></p> <ul style="list-style-type: none"> <li>• Selection criteria;</li> <li>• Whether the member is voting or non-voting;</li> <li>• Term of service; and</li> <li>• Method for adding/removing members.</li> </ul> <p align="center">Please see memo section 3b for faculty of record</p>										
<b>3c</b>	<p><b>Advisory board.</b> Will the undergraduate certificate have an advisory board<sup>4</sup>?      Yes <input type="checkbox"/>      No <input checked="" type="checkbox"/></p> <p>If "Yes," please describe the standards by which the faculty of record will add or remove members of the advisory board. <i>(150 word limit)</i></p> <p>.</p> <p>If "Yes," please list below the <u>number</u> of each type of individual (as applicable) who will be involved in the advisory board.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"></td> <td>Faculty within the college who are within the home educational unit.</td> </tr> <tr> <td></td> <td>Faculty within the college who are outside the home educational unit.</td> </tr> <tr> <td></td> <td>Faculty outside the college who are within the University.</td> </tr> <tr> <td></td> <td>Faculty outside the college and outside the University who are within the United States.</td> </tr> <tr> <td></td> <td>Faculty outside the college and outside the University who are outside the United States.</td> </tr> </table>		Faculty within the college who are within the home educational unit.		Faculty within the college who are outside the home educational unit.		Faculty outside the college who are within the University.		Faculty outside the college and outside the University who are within the United States.		Faculty outside the college and outside the University who are outside the United States.
	Faculty within the college who are within the home educational unit.										
	Faculty within the college who are outside the home educational unit.										
	Faculty outside the college who are within the University.										
	Faculty outside the college and outside the University who are within the United States.										
	Faculty outside the college and outside the University who are outside the United States.										

<sup>4</sup> An advisory board includes both faculty and non-faculty who advise the faculty of record on matters related to the program, e.g. national trends and industry expectations of graduates.

**NEW UNDERGRADUATE CERTIFICATE**

	Students who are currently in the program.		
	Students who recently graduated from the program.		
	Members of industry.		
	Community volunteers.		
	Other. Please explain:		
	<b>Total Number of Advisory Board Members</b>		
<hr/>			
3d	<b>Course utilization.</b> Will this undergraduate certificate utilize courses from other academic units?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," two pieces of supporting documentation are required.		
	<input checked="" type="checkbox"/> Check to confirm that appended to the end of this form is a letter of support from the other units' chair/director <sup>5</sup> from which individual courses will be used. The letter must include demonstration of true collaboration between multiple units <sup>6</sup> and impact on the course's use on the home educational unit.		
	<input checked="" type="checkbox"/> Check to confirm that appended to the end of this form is verification that the chair/director of the other unit has consent from the faculty members of the unit. This typically takes the form of meeting minutes.		
<hr/>			
3e	<b>Financial Resources.</b> What are the (non-course) resource implications for the proposed undergraduate certificate, including any projected budget needs? (300 word limit)		
	<i>The creation of this certificate program will not incur additional costs. The College of Arts and Sciences will provide a budget for recruitment materials. No other budget resources are required. Additional administrative space is not required. Adequate seats are currently available in all courses. Additional program specific sections of courses are not required</i>		
<hr/>			
3f	<b>Other Resources.</b> Will the proposed undergraduate certificate utilize resources (e.g. departmentally controlled equipment or lab space) from additional units/ programs?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
	If "Yes," identify the other resources that will be shared. (150 word limit)		
	If "Yes," two pieces of supporting documentation are required.		
	<input type="checkbox"/> Check to confirm that appended to the end of this form is a letter of support from the appropriate chair/director <sup>7</sup> of the unit whose "other resources" will be used.		
	<input type="checkbox"/> Check to confirm that appended to the end of this form is verification that the chair/director of the other unit has consent from the faculty members of the unit. This typically takes the form of meeting minutes.		
<hr/>			
<b>4. IMPACT</b>			
4a	<b>Other related programs.</b> Are there any related UK programs and certificates?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	If "Yes," describe how the new certificate will complement these existing UK offerings. (250 word limit)		
	<i>The College of Medicine offers the Master of Science (MS) in Medical Sciences, which may be used by students seeking credentials in the biomedical sciences as a preliminary to applying for medical school or other health</i>		

<sup>5</sup> A dean may submit a letter only when there is no educational unit below the college level, i.e. there is no department/school.

<sup>6</sup> Show evidence of detailed collaborative consultation with such units early in the process.

<sup>7</sup> A dean may submit a letter only when there is no educational unit below the college level, i.e. there are no departments/schools.

**NEW UNDERGRADUATE CERTIFICATE**

	<p><i>sciences professional programs. This program enhances the credentials of students who have already completed the pre-medical requirements and who wish to improve their academic standing and competitiveness. It is not a career-changers program and does not offer the pre-medical coursework. The two programs will complement each other and will not compete for the same pool of students. This certificate program does not impact any undergraduate degree program offered at UK</i></p>
	<p>If “Yes,” two pieces of supporting documentation are required.</p> <p><input checked="" type="checkbox"/> Check to confirm that appended to the end of this form is a letter of support from the appropriate chair/director of the unit whose “other resources” will be used.</p> <p><input checked="" type="checkbox"/> Check to confirm that appended to the end of this form is verification that the chair/director has input from the faculty members of the unit. This typically takes the form of meeting minutes.</p>

**5. ADMISSIONS CRITERIA AND CURRICULUM STRUCTURE**

<b>5a</b>	<p><b>Admissions criteria.</b> List the admissions criteria for the proposed undergraduate certificate. <i>(150 word limit)</i></p> <p>1. <i>Must be admitted to the University of Kentucky as a Post-baccalaureate student.</i></p> <p>2. <i>Must submit an official transcript showing an awarded undergraduate degree from an accredited college or university with a minimum 3.5 undergraduate cumulative GPA.</i></p> <p>3. <i>Must be admitted into the Post-baccalaureate Undergraduate Certificate in Pre-Medicine (PREP4MD)..</i></p> <p>4. <i>Must have completed freshman English composition and calculus (calculus 1 or higher) coursework is required before admission into the program.</i></p> <p><i>*Admission into the program does not guarantee admission into medical school. Students must still apply for medical school through the normal application process</i></p>
-----------	--

<b>5b</b>	<b>Core Courses.</b> List the required courses below.		
Prefix & Number	Course Title	Credit Hrs	Course Status <sup>8</sup>
	<i>Please see attached memo section b and c for curriculum</i>		Select one....
			Select one....
			Select one....
			Select one....
			Select one....

<b>5c</b>	<b>Elective courses.</b> List the electives below.		
Prefix & Number	Course Title	Credit Hrs	Course Status <sup>9</sup>
	<i>Please see attached memo section b and c for curriculum</i>		Select one....
			Select one....
			Select one....
			Select one....

<sup>8</sup> Use the drop-down list to indicate if the course is a new course (“new”), an existing course that will change (“change”), or if the course is an existing course that will not change (“no change”).

<sup>9</sup> Use the drop-down list to indicate if the course is a new course (“new”), an existing course that will change (“change”), or if the course is an existing course that will not change (“no change”).

**NEW UNDERGRADUATE CERTIFICATE**

			Select one....
			Select one....
		<i>Total Credit Hours:</i>	<i>51</i>
5d	Are there any other requirements for the undergraduate certificate? If "Yes," note below. (150 word limit)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<i>Please see attached memo section b and c for curriculum</i>			
5e	Is there any other narrative about the undergraduate certificate that should be included in the Bulletin? If "Yes," please note below. (300 word limit)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<b>6. ASSESSMENT</b>			
6a	<b>Student learning outcomes.</b> Please provide the student learning outcomes for this undergraduate certificate. List the knowledge, competencies, and skills (learning outcomes) students will be able to do upon completion. (Use action verbs, not simply "understand.") (250 word limit)		
<p><i>Students will be able to</i></p> <ol style="list-style-type: none"> <li>1) <i>Demonstrate an understanding of chemical and physical scientific concepts</i></li> <li>2) <i>Apply biological and biochemical foundations of knowledge to scientific concepts</i></li> <li>3) <i>Identify psychological, social and biological foundations of behavior that affect an individual's perception of the world, as well as their health and behavior.</i></li> <li>4) <i>Demonstrate critical and analytical thinking, and draw conclusions from skills and practices connected to the MCAT (Medical College Admission Test). (AACU Critical Thinking outcome)</i></li> </ol>			
6b	<b>Student learning outcome (SLO) assessment.</b> How and when will student learning outcomes be assessed? Please map proposed measures to the SLOs they are intended to assess. Do not use grades or indirect measures (e.g. focus groups, surveys) as the sole method. Measures likely include artifacts such as course-embedded assessment (e.g., portfolios, research papers or oral presentations); and test items (embedded test questions, licensure/certification testing, nationally or state-normed exams). (300 word limit)		
<i>Please see attached assessment plan</i>			
6c	<b>Certificate outcome assessment<sup>10</sup>.</b> Describe program evaluation procedures for the proposed undergraduate certificate. Include how the faculty of record will determine whether the program is a success or a failure. List the benchmarks, the assessment tools, and the plan of action if the program does not meet its objectives. (250 word limit)		
<i>Please see attached assessment plan</i>			
<b>7. OTHER INFORMATION</b>			
7a	Is there any other information about the undergraduate certificate to add? (150 word limit)		
<i>see attached memo.</i>			

<sup>10</sup> This is a plan of how the certificate will be assessed, which is different from assessing student learning outcomes.



**NEW UNDERGRADUATE CERTIFICATE**

<b>8. APPROVALS/REVIEWS</b>			
Information below does not supersede the requirement for individual letters of support from educational unit administrators and verification of faculty support (typically takes the form of meeting minutes).			
	<b>Reviewing Group Name</b>	<b>Date Approved</b>	<b>Contact Person Name/Phone/Email</b>
8a	<i>(Within College) In addition to the information below, attach documentation of department and college approval. This typically takes the form of meeting minutes but may also be an email from the unit head reporting department- and college-level votes.</i>		
	<i>College of Arts and Sciences</i>		/ /
			/ /
			/ /
			/ /
8b	<b>(Collaborating and/or Affected Units)</b>		
			/ /
			/ /
			/ /
			/ /
			/ /
			/ /
			/ /
			/ /
8c	<b>(Senate Academic Council)</b>	<b>Date Approved</b>	<b>Contact Person Name</b>
	Health Care Colleges Council (if applicable)		
	Undergraduate Council	10-6-20	Joanie Ett-Mims

**To: Undergraduate Council**

**From: Ruth E Beattie**  
Associate Dean for Advising  
College of Arts and Sciences  
[Rebeat1@uky.edu](mailto:Rebeat1@uky.edu)

**Date: February 18, 2019**

**Re: Post-baccalaureate Undergraduate Certificate in Pre-Medicine Program**

Enclosed please find the application materials for a new Post-Baccalaureate Undergraduate Certificate in Pre-Medicine. (PREP4MD).

**The following documents are attached:**

- **Undergraduate Certificate form**
- **Appendix A: Reply from OSPIE**
- **Appendix B: Letter of support from the Dean of the College of Arts and Sciences**
- **Appendix C: Letter of support from the Associate Dean of Biomedical Education in the College of Medicine**
- **Appendix D: Letter of support from the Department of Biology**
- **Appendix E: Letter of support from the Department of Chemistry**
- **Appendix F: Letter of support from the Department of Molecular and Cellular Biochemistry**
- **Appendix G: Letter of support from the Department of Physics and Astronomy**
- **Appendix H: Letter of support from the Department of Psychology**
- **Appendix I: Letter of support from the Department of Sociology**
- **Appendix J: Letter of support from the Department of Statistics**

The logo consists of a white rectangular area with rounded corners, centered within a larger blue rounded rectangular border. The text "OSPIE Approval" is centered within the white area.

**OSPIE Approval**

**Appendix A: Response from OSPIE**

Received January 11, 2019

Pearson, RaeAnne

Today, 1:36 PM Beattie, Ruth;Weber, Annie; Office of Strategic Planning and Institutional Effectiveness

Dear Ruth E. Beattie ,

Thank you for submitting a Notification of intent for Post-baccalaureate Pre-Medical Certificate, GCERT1, Post-baccalaureate Certificate (51.1102).

My email will serve 2 purposes: 1.) Next steps for SACSCOC, and 2.) Verification and notification that you have contacted OSPIE—a Senate requirement for proposal approval.

1. Next steps for SACSCOC: None required
2. Verification that OSPIE has reviewed the proposal: Based on the documentation presented the proposed program does not constitute a substantive change as defined by the University or SACSCOC, the university's regional accreditor. Therefore, no additional information is required by the Office of Strategic Planning & Institutional Effectiveness at this time. The proposed program change(s) may move forward in accordance with college and university-level approval processes.

*IMPORTANT: Certificates (undergraduate and graduate) will be added to the CPE Inventory once they have been approved by the University Senate. For degree programs, an NOI will be submitted by the Office of Strategic Planning and Institutional Effectiveness to CPE and you will need to work closely with our office to ensure that your proposal meets all external CPE requirements and deadlines.*

Should you have any questions or concerns about UK's substantive change policy and its procedures, please do not hesitate to contact our office.

Office of Strategic Planning & Institutional Effectiveness  
University of Kentucky

[Visit the Office of Strategic Planning and Institutional Effectiveness Website](#)

## 2d. Benchmarks

## 2d. University of Kentucky Benchmarks/National and Regional Benchmarks Post-Baccalaureate Undergraduate Certificate in Pre-Medicine

University of Kentucky Benchmarks	Post-Baccalaureate Certificate	
<a href="#">University of California-Davis</a>	no	
<a href="#">University of Iowa</a>	no	
<a href="#">Michigan State University</a>	no	
<a href="#">University of Missouri-Columbia</a>	no	
<a href="#">University of Arizona</a>	Yes- Graduate Certificate in Professional Studies in Health Sciences	The University of Arizona is no longer offering the Graduate Certificate in Professional Studies in Health Sciences as part of their pathway program. Instead, they are offering a Master's as part of their pathway program for Medical School.
<a href="#">University of Minnesota-Twin Cities</a>	no	
<a href="#">Ohio State University-Main Campus</a>	no	
<a href="#">University of Michigan-Ann Arbor</a>	no	
<a href="#">University of Wisconsin-Madison</a>	no	
<a href="#">University of North Carolina at Chapel Hill</a>	no	
<a href="#">University of Florida</a>	no	
Regional Benchmarks	Post-Baccalaureate Certificate	Credit Hours
<i>The following institutions were identified by the Council on Postsecondary Education as having a post-baccalaureate certificate using CIP Code 51.1102</i>		
<a href="#">University of Louisville</a>	Pre-Medicine	n/a
The University of Louisville is no longer offering a certificate granting program. This change was made due to the federal government implementing changes for federal financial aid eligibility for post-bacs and certificate programs. They chose to phase out their official university issued UofL Pre-medical Certificate. Students will instead receive a certificate of Completion from the U of L School of Medicine and College of Arts & Sciences		
National Benchmarks	Post-Baccalaureate Certificate	Credit Hours
<i>The following institutions were identified by Burning Glass as having a post-baccalaureate certificate using CIP Code 51.1102</i>		
<a href="#">Lake Erie College of Osteopathic Medicine</a>	Health Sciences Medical Post Baccalaureate Certificate of Completion	15 credit hours- They are not awarding a formal certificate, but instead awarding a certificate of completion
<a href="#">Edward Via College of Osteopathic Medicine</a>	Graduate Certificate in Pre-Medical Studies	35 credit hours
<a href="#">Bryn Mawr College</a>	Postbaccalaureate Premedical Program	n/a they do not list a specific number of credit hours
<a href="#">Harvard University</a>	postbaccalaureate Premedical Program	30-33 credit hours
<a href="#">Washington University in St Louis</a>	Post-Baccalaureate Premedical Program	18 credit hours
<a href="#">College of Our Lady of the Elms</a>	Postbaccalaureate Premedical Studies Certificate Program	27 credit hours
<a href="#">University of Virginia-Main Campus</a>	Post-Baccalaureate Pre-Medical Program	30 credit hours
<a href="#">George Washington University</a>	Post-Baccalaureate Pre-Medicine Certificate Program	36 credit hours
<a href="#">Goucher College</a>	Post-Baccalaureate Premed Program	8 semester long courses
<a href="#">Johns Hopkins University</a>	Post-Baccalaureate Health Science Intensive Program	10 courses- Students concurrently earn a Master's of Science in Biotechnology. This is not a true Post-baccalaureate undergraduate certificate.
<a href="#">Charles R Drew University of Medicine and Science</a>	Enhanced Post Baccalaureate Certificate Program in Pre-Medicine	24-36 units
<a href="#">Mills College</a>	Post-Bac Pre-Medical Certificate	36 credit hours
<a href="#">Tufts University</a>	Postbaccalaureate Premedical Program	minimum of 6 courses
<a href="#">Scripps College</a>	Post-Baccalaureate Premedical Program	8 courses
<a href="#">Wright State University-Main Campus</a>	Post-Bac Certificate Program in Pre-Medical Studies	60 semester hours
<a href="#">Brandeis University</a>	Post-Baccalaureate Premedical Program	minimum of 12 credit hours
<a href="#">Creighton University</a>	Post-Baccalaureate Pre-Medicine Certificate	13-month program. Specific curriculum is not listed
<a href="#">Montana State University</a>	Post Baccalaureate Pre-Medical Certificate	36 credit hours. They specifically state that this certificate is considered a graduate program for financial aid purposes even though the students are only completing undergraduate coursework.
<a href="#">Mount Holyoke College</a>	Postbaccalaureate Pre-Medical Program	This program is no longer being offered
<a href="#">La Salle University</a>	Post-Baccalaureate Premedical Certificate Program	36 credit hours. students with Baccalaureate degrees in the biological sciences are not eligible.
<a href="#">Hawaii Pacific University</a>	Post-Baccalaureate Certificate In Pre-Medical/Pre-Health Studies	24-56 credit hours
<a href="#">University of Nevada-Reno</a>	Post-Baccalaureate Program, Certificate	32 credit hours
<a href="#">American University</a>	Post-Baccalaureate Premedical Certificate	24 credit hours
<a href="#">Dominican University</a>	Post Baccalaureate Premedical Program	This is not a certificate program. They are calling this a specialized second bachelors degree
<a href="#">Duquesne University</a>	Post-Baccalaureate Pre-Medical and Health Professions Certificate program	24 credit hours
<a href="#">Hofstra University</a>	Premedical Post-Baccalaureate Certificate Program in Natural Science	minimum of 32 credit hours
<a href="#">John Carroll University</a>	Pre-Medical Post-Baccalaureate Program	26-34 credit hours
<a href="#">Notre Dame de Namur University</a>	Post-baccalaureate Premedical Program	Approximately two years worth of coursework
<a href="#">Rockhurst University</a>	Pre-Med Post-Baccalaureate Certificate	47 credit hours. Only a career changer program.
<a href="#">University of Connecticut</a>	Medicine and Dental Medicine Post-Baccalaureate Program	30-60 credits
<a href="#">University of Hartford</a>	Post-Baccalaureate Premedical Professions Certificate Program	30 credit hours
<a href="#">Xavier University</a>	Post-Baccalaureate Certificate in Pre-Medical	37 credit hours
<a href="#">Bennington College</a>	Postbaccalaureate Premedical Program	9 courses
<a href="#">Spring Hill College</a>	Post-Baccalaureate Premedical Studies	4 semesters

## Occupation Analysis - Physician

Diagnoses and treats illness and injuries in patients. May specialize in working with a particular group of people (such as children), or a particular area of health care and treatment (such as cardiology, oncology, surgery, radiology or anesthesiology). Works from a private practice or within a hospital or larger healthcare facility.

Common job titles: Family Practice, Physician, Internal Medicine, Psychiatry General, Psychiatrist

Active Selections: Kentucky , Physician

### Job Metrics

Job Postings  
Last 12 Months

Very High Demand

5,474

Projected Growth  
10 Years

+10.3%

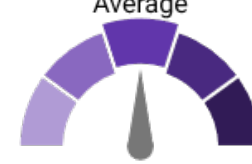
Time To Fill

Similar to Fill

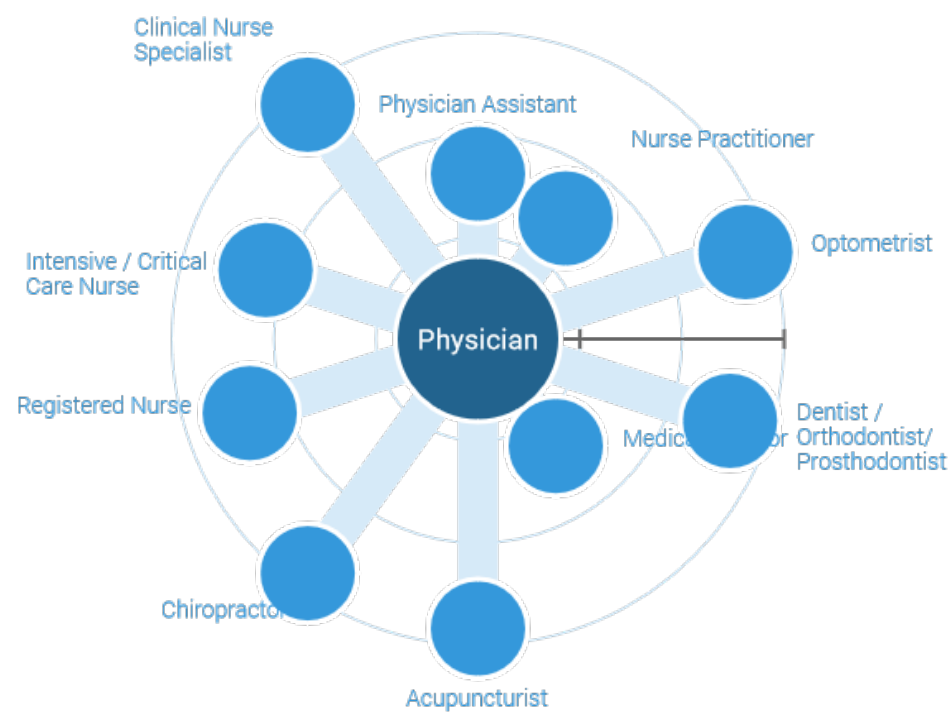
57 days

Location Quotient

Average



### Related Jobs



## Occupation Analysis - Physician

Diagnoses and treats illness and injuries in patients. May specialize in working with a particular group of people (such as children), or a particular area of health care and treatment (such as cardiology, oncology, surgery, radiology or anesthesiology). Works from a private practice or within a hospital or larger healthcare facility.

Common job titles: Family Practice, Physician, Internal Medicine, Psychiatry General, Psychiatrist

### Active Selections

Kentucky , Physician

#### Job Metrics

Job Postings  
Last 12 Months

Very High Demand

5,474

Projected Growth  
10 Years



Time To Fill

Similar to Fill

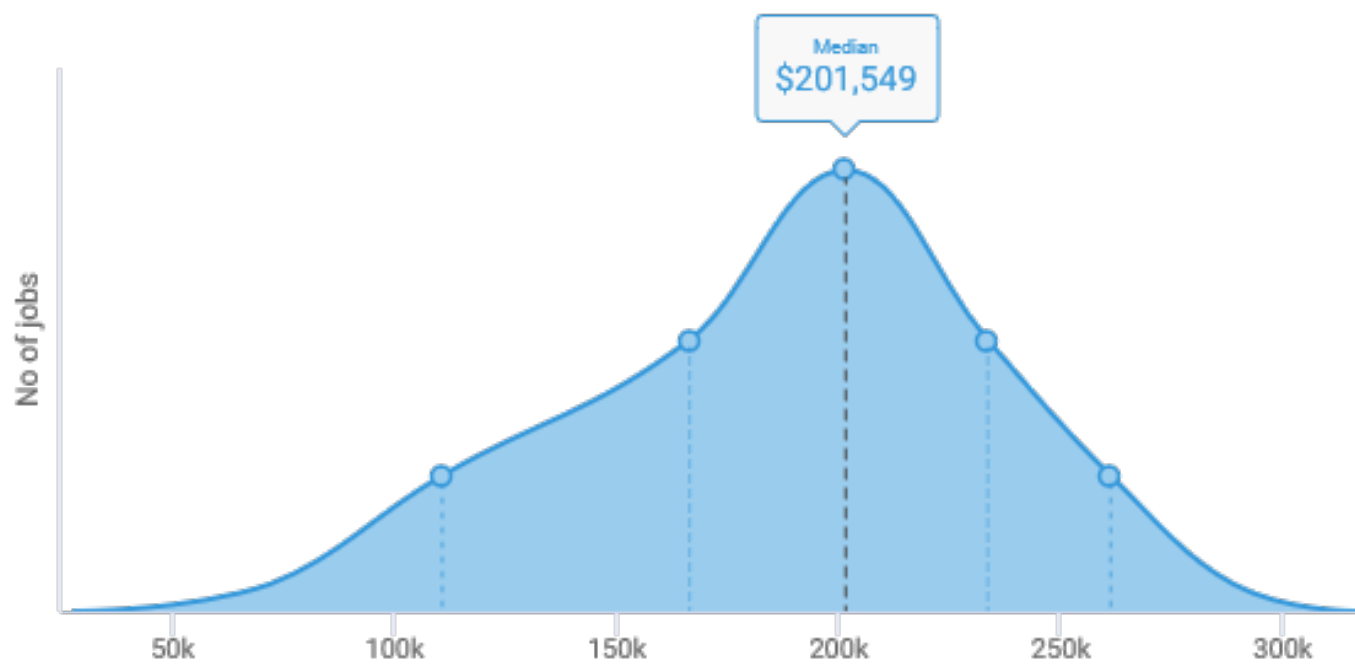
57 days

Location Quotient

Average



#### Salary Overall





## Job Qualifications

### Years of Experience



### Education Level



### Frequency Requested

#### Certification

	Occasionally	Sometimes	Often
Board Certified/Board Eligible	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Advanced Cardiac Life Support (ACLS) Certification	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Top Skills

### Specialized Skills

Internal Medicine
Family Medicine
Surgery
Primary Care
Psychiatry
Patient Care
Practicing Medicine

### Baseline Skills

Writing
Research
Planning
Teamwork / Collaboration
Microsoft Excel
Communication Skills
English

## Occupation Analysis - Physician

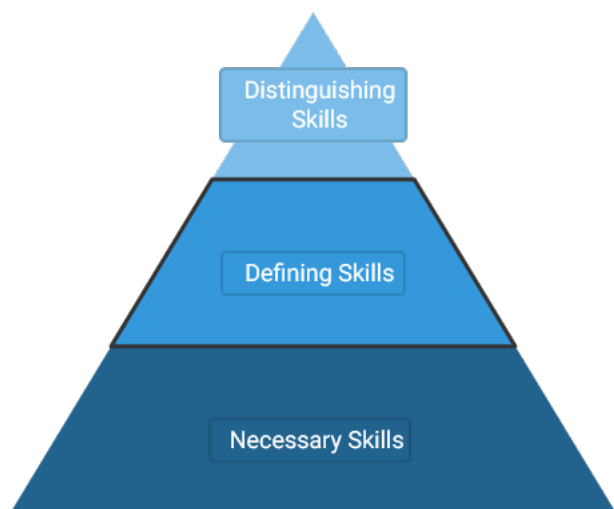
Diagnoses and treats illness and injuries in patients. May specialize in working with a particular group of people (such as children), or a particular area of health care and treatment (such as cardiology, oncology, surgery, radiology or anesthesiology). Works from a private practice or within a hospital or larger healthcare facility.

Common job titles: Family Practice, Physician, Internal Medicine, Psychiatry General, Psychiatrist

### Active Selections

Kentucky , Physician

### Occupational Skills for Physician



An occupation's Defining skills represent the day-to-day tasks and responsibilities of the job. An employee needs these skills to qualify for and perform successfully in this occupation.

Skill	Salary Premium	Job Postings Requesting Last 12 months	Projected Growth 2 Years	Location Quotient
Internal Medicine		868	-0.2%	1.3
Family Medicine		809	+8.4%	1.3
Surgery		612	+0.9%	1.3
Primary Care		586	+10.4%	1.2
Psychiatry		465	+4.8%	0.9
Pediatrics		274	+1.5%	0.8

[Learn more](#) about Occupational Skill Categories

### Top Requested Skills for Physician

Skill	Skill Type	Occupational Skills Category	Salary Premium	Job Postings Requesting Last 12 months	Projected Growth 2 Years	Location Quotient
Internal Medicine	Specialized	Defining		868	-0.2 %	1.3
Family Medicine	Specialized	Defining		809	+8.4 %	1.3
Surgery	Specialized	Defining		612	+0.9 %	1.3
Primary Care	Specialized	Defining		586	+10.4 %	1.2
Psychiatry	Specialized	Defining		465	+4.8 %	0.9
Patient Care	Specialized	Necessary		435	-3.6 %	0.8
Practicing Medicine	Specialized	Distinguishing		358	-16.3 %	1.2
Emergency Medicine	Specialized	Distinguishing		355	+7.7 %	1.5
Neurology	Specialized	Distinguishing		345	+3.9 %	1.8
Writing	Baseline	NA		296		1.7
Obstetrics/Gynecology	Specialized	Distinguishing		282	+1.5 %	1.1
Pediatrics	Specialized	Defining		274	+1.5 %	0.8
Research	Baseline	NA		253		0.8
Osteopathic Medicine	Specialized	NA		242	-14.9 %	1.4
Teaching	Specialized	NA		241	-5.0 %	0.8
Advanced Cardiac Life Support (ACLS)	Specialized	NA		233	+7.5 %	1.3
Cardiology	Specialized	NA		230	+3.8 %	2.0
Scheduling	Specialized	NA		223	+3.4 %	1.3
Osteopathy	Specialized	NA		212	-46.3 %	1.3
Anesthesiology	Specialized	NA		209	-3.6 %	0.9
Obstetrics	Specialized	Distinguishing		199	+5.5 %	1.1
Urology	Specialized	NA		199	+3.9 %	1.7
Primary Care Physician	Specialized	NA		196	+11.3 %	1.4
Gastroenterology	Specialized	NA		194	+9.5 %	1.6
Radiology	Specialized	NA		190	+5.6 %	1.4
Planning	Baseline	NA		177		2.2
Gynecology	Specialized	Distinguishing		173	+6.1 %	1.1
X-Rays	Specialized	NA		153	+4.8 %	1.5
Teamwork / Collaboration	Baseline	NA		152		0.8
Microsoft Excel	Software and Programming	NA		149		1.3
Medical Coding	Specialized	NA		143	+7.2 %	1.2
Mental Health	Specialized	NA		141	+3.2 %	0.8

Communication Skills	Baseline	NA		141		0.7
Critical Care	Specialized	NA		134	+7.6 %	1.2
General Surgery	Specialized	NA		128	+6.5 %	1.5
English	Baseline	NA		128		1.1
Critical Thinking	Baseline	NA		127		1.3
Mentoring	Baseline	NA		125		1.2
Social Services	Specialized	NA		122	+19.6 %	1.1
Orthopedic Surgery	Specialized	NA		120	-0.4 %	1.2
Patient Treatment	Specialized	NA		113	+7.4 %	1.1
Adult Psychiatry	Specialized	NA		112	+16.6 %	1.0
Orthopedics	Specialized	NA		109	+9.7 %	1.2
Urgent Care	Specialized	Distinguishing		102	+18.8 %	0.5
Life Support	Specialized	NA		86	-4.6 %	1.3
Oncology	Specialized	NA		84	+3.6 %	0.9
Injections	Specialized	NA		82	+11.6 %	1.4
Treatment Planning	Specialized	NA		79	+4.5 %	0.7
Geriatrics	Specialized	NA		78	-2.2 %	1.1
Pain Management	Specialized	NA		75	+8.0 %	1.3

## 3a. Examples of Co-Curricular Activities

### **Section 3a. Co-curricular Activities**

A Pre-Health Professions Professional Advisor will advise students in the program.

In addition to the coursework listed in 5b, the program will include a variety of co-curricular activities:

- Workshops on the medical school application process and being a competitive applicant
  - Beginning a Pre-Health Professions Track
  - MCAT Preparation
  - MCAT Practice Exam
  - Pre-Medicine Q&A
  - Are You Ready? Having a Competitive Profile?
  - Shadowing, Research & Internships
  
- Mock interviews
- Lectures on ethics in healthcare
- Research opportunities
- Job shadowing opportunities
- Volunteer opportunities – Shoulder-to-Shoulder, etc

## 3b. Faculty of Record

### **3b. Faculty of Record**

The departments contributing to the interdisciplinary certificate (Biology, Chemistry, Physics and Astronomy, Statistics, Psychology, Sociology, and Molecular and Cellular Biochemistry) will each choose a faculty representative to serve on the faculty of record. They will have equal voting rights and control over changes and/or additions to the curriculum. The certificate director will be a faculty member from the College of Arts and Sciences and appointed by the Dean of College of Arts and Sciences in consultation with the faculty of record. The certificate director will be appointed for a three-year term, upon University Senate approval of the certificate. The College of Arts and Sciences pre-health professions advisors will serve as non-voting ex officio members of the faculty of record. A department offering a course in the Post-Baccalaureate Undergraduate Certificate in Pre-Medicine curriculum will automatically admit a faculty representative from that department, to the faculty of record with full voting rights. Failure to attend 3 consecutive faculty of record meetings will result in forfeiture of voting privileges for that departments' faculty representative in the faculty of record.

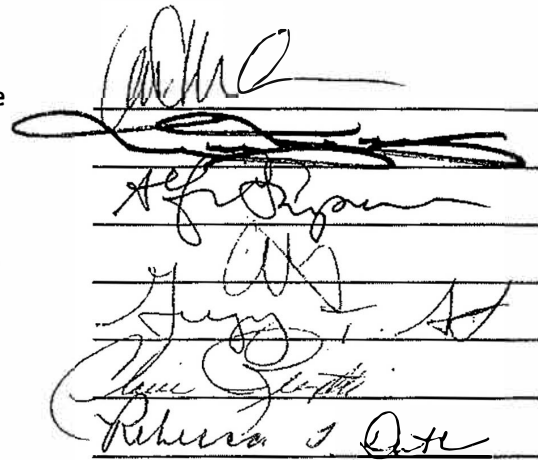


February 21, 2019

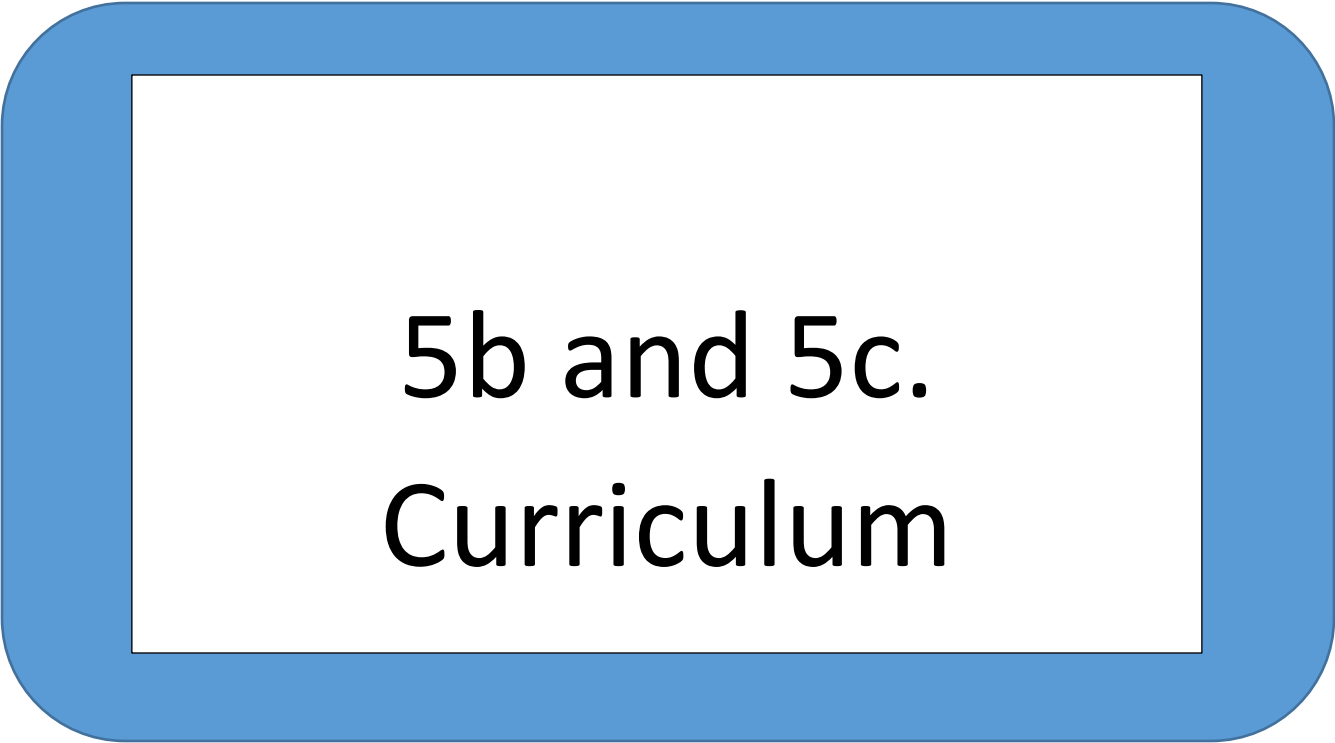
Dear Education Policy Committee,

As Department Chair/Program Director of course(s) being offered in the Post-Baccalaureate Undergraduate Certificate in Pre-Medicine, I agree that the department will choose a representative to serve on the faculty of record. The faculty of record has equal voting rights and control over changes and/or additions to the curriculum.

Biology	Vincent Cassone
Chemistry	Mark Meier
Physics and Astronomy	Al Shapere
Statistics	Arny Stromberg
Psychology	Greg Smith
Sociology	Claire Renzetti
Molecular and Cellular Biology	Rebecca Dutch



Handwritten signatures of the seven faculty members listed in the table, each written on a horizontal line.



5b and 5c.  
Curriculum

## Post-Baccalaureate Undergraduate Certificate in Pre-Medicine Curriculum

1. To earn the certificate, students must complete the 51 credit hours of the Post-Baccalaureate Undergraduate Certificate in Pre-Medicine Curriculum (from the list below). Students must complete a minimum of 15 credit hours of certificate coursework after they are admitted into the certificate program. At least 12 credit hours of the 15 credit hours must be at the 200-level or above, and at least 6 credit hours must be from the 300-level or above.

A minimum of 15 credit hours of the certificate coursework must NOT have been previously successfully completed by the student.

*Students may count previously earned coursework towards the certificate curriculum (grades earned on prior coursework, even if taken at the University of Kentucky, will not count towards the certificate GPA.)*

2. Students must complete a breadth component where at least 3 credit hours of coursework must be taken from a second discipline using a different course prefix.

3. All coursework for the certificate must be taken for a letter grade and students must earn at least a B in all coursework taken after admission to the certificate program in order to receive credit.

4. No more than 9 credit hours taken for the certificate can be used to satisfy the requirements for a second bachelor's degree, a minor, or another certificate at the University of Kentucky

### Core Courses

PSY 100	Introduction to Psychology	4 credit hours
CHE 105	General Chemistry I	4 credit hours
CHE 111	General Chemistry I Laboratory	1 credit hour
CHE 107	General College Chemistry II	3 credit hours
CHE 113	General Chemistry II Laboratory	2 credit hours
BIO 148	Introductory Biology I	3 credit hours
BIO 155	Laboratory for Introductory Biology I	1 credit hour
BIO 152	Principles of Biology II	3 credit hours
CHE 230	Organic Chemistry I	3 credit hours
CHE 231	Organic Chemistry Laboratory I	1 credit hour
CHE 232	Organic Chemistry II	3 credit hours
CHE 233	Organic Chemistry Laboratory II	1 credit hour
PHY 211	General Physics	5 credit hours
PHY 213	General Physics	5 credit hours
STA 296	Statistical Methods and Motivations	3 credit hours
SOC/HSP 255	Medicine, Health, and Society	3 credit hours
BCH 401G	Fundamentals of Biochemistry	3 credit hours

### Elective Requirement

3 credit hours

*Students choose ONE elective course based on specific course requirements for the medical school they are applying to. Below are suggested electives for students applying to medical school in Kentucky.*

College of Medicine, University of Kentucky - BIO 315

School of Medicine, University of Louisville - BIO 304, BIO 350

Kentucky College of Osteopathic Medicine - BIO 304, BIO 315, BIO 350

**Sample #1: Student enters program with no prior pre-med coursework.**

Spring: CHE 105 and CHE 111, BIO 148 and BIO 155, PSY 100, STA 296, co-curricular activities (16 cr hrs)

Summer: CHE 107 and CHE 113, PHY 211 (10 cr hrs)

Fall: BIO 152, CHE 230, CHE 231, PHY 213, SOC 255, co-curricular activities, begin MCAT preparation (15 cr hrs)

Spring: CHE 232, CHE 233, BCH 401G, 300+ elective MCAT preparation, practice MCAT, co-curricular activities (10 cr hrs)

MCAT taken at end of Spring semester.

**Sample #2: Student enters program having completed the introductory biology, chemistry and psychology sequence of courses**

Fall: CHE 230, CHE 231, PHY 211, STA 296, SOC 255, co-curricular activities, begin MCAT preparation (15 cr hrs)

Spring: CHE 232, CHE 233, BCH 401G, 300+ elective, PHY 213 MCAT preparation, practice MCAT, co-curricular activities (15 cr hrs)

MCAT taken at end of Spring semester.

# 6. Assessment

## 6. Post-Baccalaureate Undergraduate Certificate in Pre-Medicine

### ASSESSMENT PLAN- February 2019

#### **Introduction:**

This assessment plan is for the Post-Baccalaureate Undergraduate Certificate in Pre-Medicine offered in the College of Arts and Sciences.

#### **Mission Statement:**

The Post-Baccalaureate Undergraduate Certificate in Pre-Medicine is committed to preparing students for the Medical College Admission Test (MCAT). By taking coursework across disciplines students will develop the knowledge and skills required for success on the medical college admission test (MCAT) and in the medical profession.

#### **Basic Assessment Approach:**

All outcomes will be assessed within a three-year cycle. Please see attached curriculum map and assessment instruments.

#### **Assessment Oversight and Resources:**

The certificate director will also serve as the assessment coordinator. It is the responsibility of the assessment coordinator to monitor the activities of assessment that occur in the certificate program. The assessment coordinator will convene an assessment committee annual for the assessment of student artifacts, and will assemble the results into an annual assessment report, which will be communicated to the faculty of record and delivered to the college. The certificate director will discuss the results of the assessment with the faculty of record on an annual basis.

#### **Program-Level Student Learning Outcomes:**

- 1) Demonstrate an understanding of chemical and physical scientific concepts
- 2) Apply biological and biochemical foundations of knowledge to scientific concepts
- 3) Identify psychological, social and biological foundations of behavior that affect an individual's perception of the world, as well as their health and behavior.
- 4) Demonstrate critical and analytical thinking, and draw conclusions from skills and practices connected to the MCAT (Medical College Admission Test). (AACU Critical Thinking outcome)

## Curriculum Map for Post-Baccalaureate Undergraduate Certificate in Pre-Medicine:

(1=Introduce; 2=Reinforce; 3=Emphasize)

Course	SLO #1: chemical and physical scientific concepts	SLO # 2: biological and biochemical foundations	SLO # 3: psychological, social and biological foundations of behavior	SLO #4 Think critically and analytically
PSY 100			1	1
CHE 105	1	1		1
CHE 107	2	2		2
CHE 111	2	2		2
CHE 113	2	2		2
BIO 148	1	1	1	1
BIO 152	2	2	2	2
BIO 155	3	3	3	3
CHE 230	2	2	2	3
CHE 231	2	2	2	3
CHE 232	2	2	2	3
CHE 233	3	2	2	3
PHY 211	1	1	1	1
PHY 213	2	2	2	2
STA 296	1	1	1	1
SOC/HSP 255			2	2
BCH 401G	3	3	3	3

### Assessment Measures and Methods:

#### Direct Methods:

Assignments will be collected in all courses offered in the curriculum. The certificate director will collect the assignments and share with the assessment committee by April 30<sup>th</sup> every year. The Assessment Coordinator will convene a committee to review the targeted Student Learning Outcomes for that year. Members of the assessment committee will be drawn from the faculty of record.

All outcomes are assessed using rubrics created by the certificate program faculty for the targeted Student Learning Outcome. Students must receive a 3 or 2 on the assignment to consider the learning outcome met.

#### Data Collection and Review:

Projects and assignments from the courses offered in the curriculum will be collected and assessed annually, according to the three-year assessment cycle. The certificate director will convene an assessment committee consisting of 3-4 faculty members who teach courses in the program; they will evaluate student learning outcomes as demonstrated by student artifacts, using a rubric created by the

committee to assess the content material of all SLO's. The certificate director will be responsible for collating the assessment data and writing the annual assessment report, in collaboration with the assessment committee. The annual report will be shared with the faculty of record, and improvements or adjustments to the curriculum will be discussed annually, after the results of the report have been discussed.

**Assessment Cycle and Data Analysis:**

Assessment of student learning takes place throughout the certificate program and occurs in all courses. Artifacts of course assessment are maintained by the faculty teaching those courses for one year after the completion of the course. Program-level assessment data are gathered strategically according to the assessment plan. The certificate program will follow a three-year assessment cycle; one or two student learning outcomes will be assessed each year according to this cycle.

<b>Post-Baccalaureate Undergraduate Certificate in Pre-Medicine 2019-2022 SLO Reporting Cycle</b>				
Outcome Number	Stated Student Learning Outcome	Cycle	Academic Year	Reporting Year
Outcome 1:	Demonstrate an understanding of chemical and physical scientific concepts (Rubric to be created by certificate program faculty)	Year 1	2019-20	October 31, 2020
Outcome 2:	Apply biological and biochemical foundations of knowledge to scientific concepts (Rubric to be created by certificate program faculty)	Year 2	2020-21	October 31, 2021
Outcome 3:	Identify psychological, social and biological foundations of behavior that affect an individual's perception of the world, as well as their health and behavior. (Rubric to be created by certificate program faculty)	Year 2	2020-21	October 31, 2021
Outcome 4:	Demonstrate critical and analytical thinking, and draw conclusions from skills and practices connected to the MCAT (Medical College Admission Test)	Year 3	2021-22	October 31, 2022

**Teaching Effectiveness:**

All instructors will use the university teacher course evaluation (TCE) process to be evaluated by their students each semester. Each instructor will be asked to provide a self-reflection which will include areas of improvement during the biannual faculty merit evaluation report process. The chair will review the TCE results with instructors and provide feedback to the instructors on an annual basis, and discuss self-reflection on a biannual basis.



**Post-Graduate Success:**

Our program will look at data provided by the university alumni survey. The certificate program will attempt to stay in contact with former students through an alumni mailing list, to be initiated at the inception of the certificate program. Periodic surveys of alumni will be taken through this venue.

We will tracking student post-graduate success by

- Tracking student retention and completion of the program (greater than 85% retention/completion)
- Tracking student performance on the MCAT, including section sub scores (Greater than or equal to national averages)
- Tracking student success through acceptance into medical school (at least 75% acceptance into any medical school program)



Letters

**From:** [Brady, Christian](#)  
**To:** [Harmon, Camille](#)  
**Subject:** Re: Endorsement for the Post-baccalaureate Undergraduate Certificate in Pre-Medicine  
**Date:** Tuesday, September 29, 2020 8:05:06 AM

---

Dear Camille

I do indeed support this proposal. Let me know if you would like Teresa to write up a more formal letter with my signature.

Yours,  
Cb

--

Christian M M Brady, DPhil (Oxon.)  
[christian.brady@uky.edu](mailto:christian.brady@uky.edu)

Interim Dean  
College of Arts & Sciences  
Professor of Ancient Hebrew and Jewish Literature  
Department of Modern & Classical Languages, Literatures & Cultures

Teresa Smith  
Executive Assistant | Office of the Dean | College of Arts & Sciences  
O: 859-257-1375  
[teresa.smith@uky.edu](mailto:teresa.smith@uky.edu)

---

**From:** "Harmon, Camille" <camille.harmon@uky.edu>  
**Date:** Monday, September 28, 2020 at 10:39 AM  
**To:** Christian Brady <Christian.Brady@uky.edu>  
**Subject:** Endorsement for the Post-baccalaureate Undergraduate Certificate in Pre-Medicine

Good Morning Dean Brady,

I believe Ruth Beattie has already spoken to you about the Post-baccalaureate Undergraduate Certificate in Pre-Medicine that we have been working on for a few years. I am getting ready to submit the updated proposal to UGC.

The updated proposal includes a letter that I wrote on behalf of Mark on August 26<sup>th</sup> (page 34 in the proposal). I am attaching his approval of the letter for your reference. In an effort to not give UGC a reason to delay the proposal, Ruth and I agreed that it would be best to have you endorse the college approval of the certificate.

Rationale for proposal: *The Post-Baccalaureate Undergraduate Certificate in Pre-Medicine is a cross-disciplinary certificate program that better prepares students to enter Medical School. The Post-Baccalaureate Undergraduate Certificate in Pre-Medicine will be of interest to students who have earned a bachelor's degree and wish to change their career path to medicine. By taking coursework across disciplines, students will develop the knowledge and skills required for success on the medical college admission test (MCAT) and in the medical profession.*

If you approve, would you mind responding to this email indicating your support? Please let me know if you have any questions, or if I can provide any additional information.

Thank you,

Camille Harmon  
Curriculum and Program Coordinator  
Dean's Office  
College of Arts and Sciences  
University of Kentucky  
202 Patterson Office Tower  
859-257-3966

August 26, 2020

Dear Undergraduate Council,

I am pleased to express the College's strongest support of the proposed Post-baccalaureate Undergraduate Certificate in Pre-Medicine. The Post-baccalaureate Undergraduate Certificate in Pre-Medicine will prepare students who have earned a bachelor's degree and wish to change their career path to medicine. The certificate will provide students with an opportunity to develop the knowledge and skills required for success on the medical college admission test (MCAT) and in the medical profession. The enclosed proposal has been carefully vetted by the college's Education Policy Committee in close consultation with the Dean's office.

The proposed Post-baccalaureate Undergraduate Certificate in Pre-Medicine will utilize the strengths of the outstanding faculty in the College of Arts and Sciences and the College of Medicine.

The experience gained through the Post-baccalaureate Undergraduate Certificate in Pre-Medicine will augment students' career and professional opportunities by providing a high quality accelerated pre-medical preparation for post-baccalaureate students wishing to enter the competitive medical school admissions process. Students enrolled in the post-baccalaureate under graduate certificate will have access to workshops on the medical school application process, mock interviews, lectures on ethics in healthcare, research, and job shadowing opportunities. A Post-baccalaureate Undergraduate Certificate in Pre-Medicine will attract a broad spectrum of interest from recent graduates and non-traditional students who have earned a bachelor's degree and wish to change their career path, but who have not yet completed the entire pre-medical curriculum.

In terms of additional resources required to offer the post-baccalaureate undergraduate certificate, no additional faculty or staff will be needed. The College of Arts and Sciences is committed to covering the administrative stipend for the director of the certificate until the certificate is able to generate enough money to cover the cost.

The College of Arts and Sciences fully supports the proposed Post-baccalaureate Undergraduate Certificate in Pre-Medicine.

Sincerely,



Mark Lawrence Kornbluh  
Dean

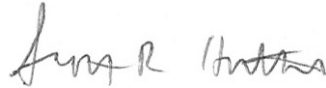
see blue.™

March 5, 2019

Dear Undergraduate Council,

On behalf of the faculty of the College of Arts and Sciences, the Education Policy Committee discussed and approved the proposed Post-baccalaureate Undergraduate Certificate in Pre-Medicine 9:0:0 on Tuesday, March 5, 2019.

Sincerely,



Scott Hutson  
Chair, Education Policy Committee



**College of Medicine**  
*Rebecca Ellis Dutch, Ph.D.*  
*Department of Molecular and*  
*Cellular Biochemistry*  
*BBSRB B143*  
*Lexington, KY 40536-0509*  
*Tel: (859) 323-1795*  
*E-mail: rdutc2@uky.edu*

January 26, 2018

Dear Dr. Beattie,

I am in my capacity as Associate Dean for Biomedical Education for the College of Medicine to support the proposal for creation of a post-bac programs aimed at preparing students for medical and dental school. This should be a very helpful program for students interested in these programs whose undergraduate training did not include the required prerequisite courses.

I think it is important to note that your proposed program does not target the same set of students as the Masters in Medical Science Master's program (MS/MS) that is housed in the College of Medicine. That program focuses on students who have completed undergraduate degrees in biomedically-related areas, but who wish to pursue graduate level courses and master's research to enhance their training, provide new career opportunities, and, in some cases, improve their ability to gain entrance into professional school.

We look forward to working with you on this new program!

Sincerely,

Rebecca Dutch  
Professor and Interim Chair, Molecular and Cellular Biochemistry  
Associate Dean for Biomedical Education

February 18, 2019



**University of Kentucky**  
**College of Arts and Sciences**  
Department of Chemistry  
161 Jacobs Science Building  
Lexington, KY 40506  
P: 859-257-7080  
<https://chem.as.uky.edu/>

Dr. Ruth Beattie  
Associate Dean for Advising  
College of Arts and Sciences  
University of Kentucky  
Lexington, KY 40506

Dear Ruth,

I am happy to report that the Department of Chemistry endorses the *Post-Baccalaureate Undergraduate Certificate in Medicine* Program. This proposal was discussed and endorsed by the Chemistry faculty in a faculty meeting held on November 10, 2016.

We understand that a number of chemistry courses (general chemistry and organic chemistry) are required by this program, and we will ensure that there are sufficient seats to accommodate students in the Certificate program.

Please let me know if there is anything else we need to do to help with the approval process. We look forward to this program becoming formally established.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Meier', with a long horizontal flourish extending to the left.

Mark Meier  
Chair, Department of Chemistry



August 26, 2020

Dear Education Policy Committee,

The Department of Biology discussed and approved (30 in favor) the inclusion of BIO 148, BIO 152, and BIO 155 on October 16, 2016 as major core courses in the Post-Baccalaureate Undergraduate Certificate in Pre-Medicine.

Sincerely Yours,



Vincent M. Cassone, Ph.D.  
Gill Eminent Professor of Arts & Sciences  
Chair, Department of Biology  
Director, HHMI STEMCats Program

see blue.™



**University of Kentucky**  
**College of Arts and Sciences**  
Department of Physics and Astronomy

177 Chemistry-Physics Building  
Lexington, KY 40506  
phone: 859-257-6101  
shapere@pa.uky.edu

19 February 2019

Prof. Ruth E. Beattie  
Associate Dean for Advising  
College of Arts and Sciences  
University of Kentucky

Dear Prof. Beattie,

The Department of Physics and Astronomy supports the proposed Post-Baccalaureate Undergraduate Certificate in Medicine.

Up to 10 seats will be made available per year in PHY 211 and PHY 213 to accommodate the certificate students.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alfred D. Shapere'.

Alfred D. Shapere  
Chair, Department of Physics and Astronomy

see blue.

An Equal Opportunity University



**Department of Sociology**  
1501 Patterson Office Tower  
University of Kentucky  
Lexington, KY 40506-0027

February 19, 2019

Dr. Ruth E. Beattie  
Associate Dean for Advising  
College of Arts & Sciences  
202 POT  
University of Kentucky  
Lexington, KY. 40506

Dear Ruth,

I am delighted to write that at our department meeting on December 12, 2016, the Sociology faculty voted unanimously to support the Post-baccalaureate Undergraduate Certificate in Medicine (15-0). The department will ensure that seats are available in SOC 255 and any other required Sociology courses for students enrolled in the program.

Thank you for inviting us to participate in this important program.

Sincerely,

A handwritten signature in cursive script, appearing to read "Claire M. Renzetti".

Claire M. Renzetti, Ph.D.  
Professor and Chair of Sociology  
Judi Conway Patton Endowed Chair for Studies of Violence Against Women



**University of Kentucky**  
**College of Arts and Sciences**

311 Multidisciplinary  
Science Building  
Lexington, KY 40536-0082  
P: 859-257-6115  
<https://stat.as.uky.edu>

Dear Ruth,

As Department Chair, this letter confirms that the Statistics faculty were consulted and approved (12-0) the inclusion of STA 296 on 12/5/18 as electives in the proposed Post-baccalaureate Undergraduate Certificate in Medicine.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Arnold J. Stromberg', written over a blue diagonal line.

Dr. Arnold J. Stromberg  
Professor and Chair

seeblue.

*An Equal Opportunity University*



**College of Medicine**

*Rebecca Ellis Dutch, Ph.D.  
Department of Molecular and  
Cellular Biochemistry  
BBSRB B143  
Lexington, KY 40536-0509  
Tel: (859) 323-1795  
E-mail: rdutc2@uky.edu*

January 26, 2018

Dear Dr. Beattie,

I am writing in my capacity as Interim Chair of Molecular and Cellular Biochemistry to support the creation of a new post-bac program aimed at providing career changers the courses they need to apply to medical or dental school, and to affirm that students in this program will have access to BCH401G. We offer this two sections of this course in both fall and spring semesters, and have sufficient capacity for the students in your new program.

We look forward to working with you on this new program!

Sincerely,

A handwritten signature in cursive script that reads 'Rebecca J. Dutch'.

Rebecca Dutch  
Professor and Interim Chair, Molecular and Cellular Biochemistry  
Associate Dean for Biomedical Education



College of Arts and Sciences  
Department of Psychology  
125 Kastle Hall  
Lexington, KY 40506-0044  
859 257-9640  
*fax* 859 323-1979  
[www.uky.edu](http://www.uky.edu)

Ruth Beattie, Associate Dean  
College of Arts & Sciences  
Patterson Office Tower  
University of Kentucky

January 23, 2018

Dear Ruth,

Psychology supports the Post-Baccalaureate Pre-Medical and Pre-Dental Undergraduate Certificate program. Students enrolled in the program are welcome to enroll in PSY 100; we can readily accommodate them.

Sincerely,

A handwritten signature in black ink that reads "Robert F. Lorch, Jr." in a cursive script.

Dr. Robert F. Lorch, Jr.  
Professor & Chair  
Department of Psychology  
University of Kentucky