Clinical Research Graduate Credit Certificate Program

Person-in-Charge: Vernon Chinchilli
Program Code: HYCLRS
Campus(es): Hershey

In the current medical climate, there is a growing need for academic clinicians and health care professionals who are trained in clinical research. Unfortunately, there are few programs that offer the didactic preparation for the unique requirements of a clinical researcher.

The primary goal of this program is to provide a formal, structured program that will prepare certificate candidates to pursue a successful career in clinical research. The curriculum includes courses in biostatistics, epidemiology, clinical trials, decision and cost-effectiveness analysis, outcomes measurement, quality management, health care economics and policy, scientific communication, and SAS statistical analysis computing. The 12-credit program offers courses on weekday evenings, enabling the student to continue clinical or employment activities. Certificate candidates will be able to complete the 12-credit requirement in 2 semesters.

Effective Semester: Fall 2020
Expiration Semester: Fall 2025

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission (http://gradschool.psu.edu/prospective-students/how-to-apply/). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions Policies (http://gradschool.psu.edu/graduate-education-policies/). International applicants may be required to satisfy an English proficiency requirement; see GCAC-305 Admission Requirements for International Students (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-305-admission-requirements-international-students/) for more information.

The successful applicant must have completed a medical, nursing, or baccalaureate degree from a regionally accredited institution. Fellows and junior faculty members with current appointments at the Penn State College of Medicine, as well as nursing graduates and public health personnel, are target candidates for the certificate program.

Certificate Requirements

Requirements listed here are in addition to requirements listed in Graduate Council policy GCAC-212 Postbaccalaureate Credit Certificate Programs (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-212-postbaccalaureate-credit-certificate-programs/).

Requirements listed here are in addition to requirements listed in Graduate Council policy GCAC-212 Postbaccalaureate Credit Certificate Programs (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-212-postbaccalaureate-credit-certificate-programs/).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHS 520</td>
<td>Principles of Biostatistics</td>
<td>3</td>
</tr>
<tr>
<td>PHS 550</td>
<td>Principles of Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>PHS 519</td>
<td>Patient Centered Research</td>
<td>3</td>
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Select 3 credits from the following:

- PHS 500 Research Ethics for Clinical Investigators
- PHS 518 Scientific Communication
- PHS 521 Applied Biostatistics
- PHS 529 Biostatistical Computing for Public Health
- PHS 535 Quality of Care Measurement
- PHS 536 Health Survey Research Methods
- PHS 540 Decision Analysis for Public Health
- PHS 551 Advanced Epidemiological Methods
- PHS 570 Health Economics and Economic Evaluation
- PHS 580 Clinical Trials: Design and Analysis

Total Credits: 12

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Learning Outcomes

1. **Statistical tests**: Students will be able to understand basic statistical tests, and perform statistical inference.
2. **Statistical software**: Students will be able to use statistical software to conduct basic data analysis.
3. **Measures of disease frequency**: Students will be able to calculate and interpret measures of disease frequency and association in epidemiological studies.
4. **Analyzing epidemiological data**: Students will be able to conduct appropriate statistical analyses of epidemiological data and interpret the results.

Contact

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Program Website: View (http://med.psu.edu/clinical-research-certificate/)