

**GRADUATE CERTIFICATE IN  
CLINICAL AND TRANSLATIONAL SCIENCE  
GRADUATE STUDENT HANDBOOK  
2020 - 2021**

**Department of Behavioral Science  
College of Medicine  
University of Kentucky**

**Important Links:**

Academic Calendar:

<http://www.uky.edu/registrar/registrar-academic-calendar>

University of Kentucky Graduate School Bulletin:

<http://gradschool.uky.edu/graduate-school-bulletin>

Additional information and resources can be found at:

<http://gradschool.uky.edu/student-resources-0>

Registrar:

<http://www.uky.edu/registrar/>

Director of Graduate Studies (DGS):

Dr. Claire Clark

Email: [claire.clark@uky.edu](mailto:claire.clark@uky.edu)

Curriculum Coordinator:

Sarah Treberg

Email: [sarah.treberg@uky.edu](mailto:sarah.treberg@uky.edu)

## Introduction

Welcome to the Department of Behavioral Science at the University of Kentucky and its Certificate program in Clinical and Translational Science (CTS). You are now part of our academic community and our future. We are a diverse faculty who come from a wide variety of disciplines including Anthropology, Communications, Epidemiology and Statistics, Psychology, Sociology, and Social Work. Our educational programs bring us together for a common purpose, namely to train the next generation of CTS researchers.

The Department and program strive to provide a diverse, equitable and inclusive environment.

**Diversity** as a core value embodies inclusiveness, mutual respect, and multiple perspectives and serves as a catalyst for change. In this context, the department and program are mindful of all aspects of human differences such as socioeconomic status, race, ethnicity, language, nationality, sex, gender identity, sexual orientation, religion, geography, disability, and age.

**Inclusion** is a core element for successfully achieving diversity. Inclusion is achieved by nurturing the climate and culture of the institution through professional development, education, policy, and practice. The objective is creating a climate that fosters belonging, respect, and value for all and encourages engagement and connection throughout the department.

**Equity** is a condition achieved when everyone has the opportunity to attain their full potential and no one is disadvantaged from achieving this potential because of their social position or other socially-determined circumstance.

This manual has been prepared to assist certificate scholars in their orientation to the Department of Behavioral Science, its faculty, and procedures for the Certificate in Clinical and Translational Science program. This document is not intended to be the sole source of information. Rather, it should be viewed as complementary to the University of Kentucky Bulletin: The Graduate School (<http://gradschool.uky.edu/graduate-school-bulletin>).. This Graduate Student Handbook serves as a general guide and all program participants should consult the regulations and policies found in the University of Kentucky Graduate School Bulletin, which supersedes any information found in this Handbook.

The goal of the Certificate in Clinical and Translational Science (CTS) program is to improve the health of the citizens of the Commonwealth of Kentucky and the nation by training professionals to conduct clinical and translational science research. CTS is an academic discipline that focuses on acceleration of the translation of basic science advances to tangible improvements in public health. The program includes education in the core competencies of CTS; advanced interdisciplinary education; and research training tailored to the research interests and career objectives of the scholar. The graduate scholar must assume responsibility for planning his/her program and must take the initiative in securing advice from faculty.

Because this Handbook contains a number of active links to websites, you should save an electronic copy of this Handbook. Every effort has made to ensure that the links are correct, but if you have a problem accessing any of the webpages described in the Handbook, please email the DGS, Dr. Claire Clark ([claire.clark@uky.edu](mailto:claire.clark@uky.edu)).

## Curriculum

The Certificate in CTS requires the completion of a Core Curriculum with a grade point average (GPA) of 3.0 or better. The Core Curriculum is designed to establish knowledge-based and skill-based competencies in communication; professionalism; critical thinking; synthesis of knowledge; planning; management; assessment; and leadership in four areas: 1) CTS methods and technologies; 2) scientific knowledge; 3) measurement and statistics; and 4) research integrity (research ethics and responsible conduct of research). It is expected that most Certificate students will complete the Core Curriculum in 1-2 years.

The following courses are the Core Curriculum for the Certificate program:

BSC 731	Methods and Technologies in CTS	(3 credits)
BSC 732	Interdisciplinary Protocol Development	(3 credits)
BSC 733	Seminar in Clinical & Translational Science	(1 credit)
BSC 534	Ethics and Responsibility in Clinical Research	(3 credits)
BSC 625	Fundamentals of Biostatistics for Clinical and	(3 credits)
(772)	Translational Research (or STA, 580, Biostatistics)	(3 credits)
BSC 790	Research in Medical Behavioral Science	(1 credit)

### Course Descriptions for Core Curriculum (14 credit hours)

#### **BSC 731: Methods and Technologies in Clinical and Translational Science.**

(3 credit hours – Spring and Fall)

This overview course is designed to introduce the student to the major methods and technologies of clinical and translational science (CTS) with an emphasis on human subject's research. This course teaches students how to formulate research questions and write literature reviews; apply CTS research methods, including experimental, survey, and qualitative research methodologies, to diverse areas of research by aligning appropriate methodologies to research questions of interest; and enhance interdisciplinary communication skills.

**Prerequisites:** Graduate standing, permission of instructor

#### **BSC 732: Interdisciplinary Protocol Development.**

(3 credit hours – Spring and Fall)

This course will introduce students to the processes involved in the development and implementation of interdisciplinary research. Students will consider key aspects of the leadership, communication, and teamwork involved in conducting interdisciplinary research. Students will also learn about the structure and functioning of the National Institutes of Health (NIH) as well as the NIH grant application and review process. Finally, using their knowledge regarding the research methods and technologies of clinical and translational science, students will develop an NIH-format research grant application.

**Prerequisites:** Graduate standing, BSC 731, permission of instructor.

#### **BSC 733: Seminar in Clinical and Translational Science.**

(1-3 credit hours – Spring and Fall)

This seminar course is designed to orient students to the clinical and translational research community and activities at the University of Kentucky and to incorporate a multidisciplinary cooperative approach to clinical and translational research. Students are expected to apply their knowledge of effective scientific communication, responsible conduct of research, and methods and technologies of clinical

and translational science to ongoing discussions. The course will consist of four evening seminars focusing on different topics of clinical and translational research as well as 3 additional seminars of the student's choice.

**Prerequisites:** Graduate standing.

### **BSC 534: Ethics and Responsibility in Clinical Research.**

(3 credit hours – Spring and Fall)

The goal of this course is to provide an overview of ethical considerations when conducting and reporting clinical research, as well as to provide experience in the practice and application of ethics to clinical science. This course will address issues relevant to ethically sound study design, responsible conduct of research and scientific misconduct. Students will also complete human subject's protection training and learn to conduct research in an ethical manner.

**Prerequisites:** Graduate standing, permission of instructor.

### **BSC 625 (772): Fundamentals of Biostatistics for Clinical and Translational Research.**

(3 credit hours – Spring and Fall)

This course is for students that are either actively engaged in clinical and/or translational research or intend to be involved in research in the near future. This course consists of lectures, demonstrations and discussion sessions on biostatistics for the health sciences. The course activities are intended to promote the application of biostatistics to research concepts in the students' areas of interest and to foster practical knowledge that supports students' own research interests.

**Prerequisites:** Graduate standing, permission of instructor.

### **BSC 790: Research in Medical Behavioral Science.**

(1 credit hour – Spring, Summer and Fall)

The research practicum is based on a detailed research training plan developed with the primary mentor that contributes to original research and leads to a peer-reviewed publication.

**Prerequisites:** Graduate standing, permission of the DGS.

The BSC 790 course warrants several additional comments. First, please note that BSC 790 is an independent study course, so it does not have class meetings to attend. For Fall, Spring or Summer semester, 1 credit of BSC 790 should constitute about 3 hours per week of independent study/research across a semester that lasts approximately 16 weeks.

When you intend to register for BSC 790, there are several steps that should occur before registration. First, scholars should identify a faculty member to supervise their work in the course and meet to discuss course expectations. A mutual agreement between the student and the faculty member should be reached regarding course objectives and research-related expectations. Once that agreement has been reached, please contact the DGS (Dr. Claire Clark, [claire.clark@uky.edu](mailto:claire.clark@uky.edu)) so that you can receive permission to register for BSC 790. During the semester, scholars should meet periodically with the supervising faculty member to discuss progress. The supervising faculty member will then be asked to submit a grade for BSC 790 at the end of the semester.

## **Planning the Sequence of the Core Curriculum**

As you begin the Certificate in CTS program, you should think about the pace at which you will complete the Core Curriculum. Typically, the Core Curriculum (described above) can be completed in

1-2 years. Students who intend to complete these Core courses in 1 year may want to consider the following sequence:

### **One-Year Core Sequence**

Semester 1: BSC 731, BSC 625(772), BSC 733

Semester 2: BSC 732, BSC 534, BSC 790

Please note that BSC 731 is a prerequisite for BSC 732, and that BSC 733 and BSC 790 could easily be reversed in terms of order.

Students who intend to complete the Core courses in 2 years may want to consider the following sequence:

### **Two-Year Core Sequence**

Semester 1: BSC 731, BSC 733

Semester 2: BSC 732

Semester 3: BSC 534, BSC 790

Semester 4: BSC 625 (772)

As noted above, BSC 731 is a prerequisite for BSC 732. This two-year sequence may not be feasible based on other demands in your schedule and course availability, but it does represent a potential way to think about ordering the Core courses.

## **Registration for Courses**

Students who are beginning the Certificate in CTS program should consult the letter of acceptance from the Graduate School which contains several pieces of information about registering for classes, including a link to UKIT for establishing a UK Link Blue email account, Student ID number, and User ID. A UKIT email account must be established before attempting to register for classes. Upon acquiring a UK Link Blue account, student should visit the UK Registrar's page (<http://www.uky.edu/registrar/how-to-register>).

All students should consult the Academic Calendar in the registrar's office to determine their specific [registration window](#). Failure to register during the priority registration window will require late registration and a late fee. Courses in the CTS Core Curriculum all require permission of the instructor to register, so students should email the instructor before attempting to register, identifying themselves as a Certificate in CTS student in that email.

Please also note that students must register for at least one course every Fall/Spring semester in order to remain in the program. If a student is unable to attend courses in a given semester but is still actively engaged in research with his/her mentor, s/he should register for at least one credit hour of BSC 790 (Research in Medical Behavioral Science).

In the event that the student is not conducting research and needs to sit out for a semester, ***a Leave of Absence must be requested at least 1 week before the start of classes for that semester.*** To make a Leave of Absence request, a student should contact the DGS (Dr. Claire Clark, [claire.clark@uky.edu](mailto:claire.clark@uky.edu)). The Graduate School has set its policies for maximum Leaves of Absence as no more than two consecutive semesters off and no more than four total semesters. If either maximum is exceeded, the student will have to re-apply to the Certificate program and pay the Graduate School's application fee.

## Timetable to Completion and Requirements for Receiving the CTS Certificate

It is anticipated that the Certificate should be completed by most students in 1-2 years. Completion of the Core Curriculum with a GPA of 3.0 or better is required to receive the Certificate in Clinical and Translational Science. To ensure that your Certificate is included in your official transcript, it is your responsibility to notify the DGS (Dr. Claire Clark, [claire.clark@uky.edu](mailto:claire.clark@uky.edu)) when you have completed the required curriculum. The DGS will verify your grades in the required courses and then will submit the [Graduate Certificate Award Request](#) to the Graduate School.

## Exiting the Certificate Program

The University requires all graduate programs to have an Assessment Plan that focuses on the effectiveness of the program. To support our Assessment Plan, you will be asked at the time that you exit the Certificate program (whether through graduation, transferring to a different CTS program, or withdrawal from the program) to reflect upon the experiences that you had in the CTS Certificate program. You may be asked to complete an exit survey and/or exit interview if your schedule permits.

## Integration with the MSMS-CTS Pathway and PhD in CTS Programs

The Certificate in CTS is vertically integrated with the Master's of Science in Medical Science-CTS Pathway and PhD in CTS programs. Coursework taken for the Certificate can be applied to the MSMS or PhD requirements. However, please note that students interested in transferring to the MSMS or PhD in CTS programs will need to submit an application to the MSMS or PhD program. See <http://behavioralscience.med.uky.edu/bscience-application-process> for more information about the application process. In addition, scholars will also need to re-apply to the UK Graduate School and may be required to pay its application fee.

## Additional Information

### Beginning the Program as a Post-Baccalaureate Student

To accommodate students' timetables for program completion, there are times when students take CTS courses before formal admission to the program, usually as a post-baccalaureate student. It is the policy of the Graduate School that post-baccalaureate students can only take 9 credit hours and have them count towards the course requirements for this graduate program. If you begin taking courses as a post-baccalaureate student, you must apply to the Graduate School for formal admission as a graduate student via the [ApplyYourself website](#). It is your responsibility to complete this application. If you have previously submitted application materials to the ApplyYourself website and it will not allow you to complete the application submission, please try using a different email address from your previous application.

### Deferring Entry into This Program

If you have been admitted to this program, but have not yet begun classes and need to wait 1-2 semesters before beginning the program, you need to request a deferral. To be approved, a deferral request must be sent via email to the DGS ([claire.clark@uky.edu](mailto:claire.clark@uky.edu)) at least one week before the start of classes for that semester. Following this procedure of deferral request will prevent you from having to

submit a new application and paying another application fee to the Graduate School. Failure to submit a deferral request at least 1 week before the start of the semester will mean that you must re-apply to the Graduate School and pay another application fee. To read the Graduate School's policy regarding deferrals, please see <http://gradschool.uky.edu/student-resources-0>

## Applying for a Leave of Absence from This Program

If you need to not take courses for a semester, you need to request a leave of absence from this program. A leave of absence must be requested at least 1 week before the start of classes for that semester by emailing the DGS (Dr. Claire Clark, [claire.clark@uky.edu](mailto:claire.clark@uky.edu)). The Graduate School has set its policies for maximum Leaves of Absence as no more than two consecutive semesters off and no more than four total semesters. If either maximum is exceeded, the student will have to re-apply to the PhD program and pay the Graduate School's application fee. To read more the Graduate School's policy regarding leaves of absences, please see <http://gradschool.uky.edu/apply-readmission>

## Financial Aid and the Employee Education Program (EEP)

The Clinical & Translational Pathway does not provide stipends or tuition at the present time. However, full-time UK employees may use the [Employee Education Program](#) (EEP) to cover tuition costs. To apply to the EEP, you must fill out [this form](#) each semester and submit it after registering for classes either by email ([edubenefits@uky.edu](mailto:edubenefits@uky.edu)), fax (859-323-8494), or in-person at 115 Scovell Hall. Please be sure to check the EEP's deadlines for applying which can be found [here](#) (be sure to scroll down). If you make any changes to your courses for that semester, you will need to re-submit an amended form that shows the changes to the EEP.

The EEP has two maximums that are important to know: 1) You may only have tuition for a maximum of 8 credit hours waived per semester (and unused credit hours under this maximum do not carry over to future semesters); and 2) The maximum number of credit hours per academic year is 18 credit hours. Please note that graduate-level waivers (i.e., those that would be used for tuition in the CTS program) in excess of \$5,250 in a calendar year are subject to taxation. Answers to frequently asked questions about the EEP can be found [here](#). Questions about the EEP should be directed by email to [edubenefits@uky.edu](mailto:edubenefits@uky.edu) or by calling (859) 257-8772.

## ID Badges

The UK student ID is available at the UK WildCard [UKID Center](#), 107 Student Center, 9 am – 5 pm, for \$15 (257-1378). This ID may be used for a variety of services on campus (copying services, athletic events, library use, etc.) and provides other discounts in Lexington.

Students engaged in research may be required to access various restricted areas. In this case, they should contact the Administrator or DGS of the Department/Center in which the research is being conducted for obtaining a Medical Center ID badge.

## Health and Health Insurance

[University Health Services](#) provides medical treatment for full- and part-time students.

The university also has a student health insurance [plan](#) (voluntary) that provides benefits for sickness and injury. The University of Kentucky requires all international students and their dependents to have health insurance.

## **Parking**

Students, who are also employees, have 2 official parking options. The K tag (student) is \$272/year for the stadium parking lot, with a shuttle to the Medical Center. Additional information, including summer parking rates, can be found at the UK Parking and Transportation office [website](#).

## **Safety and Research Training**

Certificate students who participate in laboratory research must complete the basic [safety training](#) required for biomedical research at UK. Students and faculty research mentors must review any additional safety or research training requirements prior to engaging in specific lab activities.

Laboratory accidents should be reported immediately to the faculty mentor or appropriate lab personnel to determine a course of action. Non-life threatening accidents requiring medical attention need to be reported first to Worker's Care (1-800-440-6285). The injured employee (including graduate students) must go to [UK Employee Health](#) (part of University Health Services on Limestone) in the Kentucky Clinic for medical treatment.

## **Academic Probation**

A B (3.00) average in all coursework must be maintained and a minimum grade of B must be earned in the required courses. The Graduate School will place a student on academic probation if their GPA average falls below 3.00 after completing 12 or more credit hours. A student must restore their GPA to 3.00 or above within the next 9 credit hours. Otherwise, they will be dismissed by the Graduate School, but may apply for readmission at a later date. Students on academic probation are ineligible for fellowships, tuition scholarships, and final exams.

## **Termination from the Program**

The Department of Behavioral Science is bound by all university regulations regarding termination from the graduate programs as well as those for the Department stated in this manual. Students and faculty are referred to the Graduate School Bulletin for information regarding academic policies and the handbook of Student Rights and Responsibilities for additional policies, including University policy on cheating and plagiarism. The Graduate School Bulletin is available on-line at <http://gradschool.uky.edu/graduate-school-bulletin>. The Student Rights and Responsibilities handbook can be accessed on-line at <http://www.uky.edu/StudentAffairs/Code/>.

In addition, misconduct of a serious nature during the certificate program, e.g., cheating, plagiarism, scientific misconduct such as falsification of scientific data, misuse of data or misuse of equipment, are causes for dismissal from the program following procedures outlined in the [UK Student Code of Conduct](#).

## **Application to the Certificate in CTS Program**

In the event that you know other individuals who may be interested in the Certificate in Clinical and Translational Science, information about how to apply is presented below.

Applicants for the Certificate in Clinical & Translational Science program must either be enrolled in a UK graduate program or be accepted by UK Graduate School as a graduate student. Prior to submitting an application, prospective applicants must contact Sarah Treberg (Curriculum Coordinator; email: [sarah.treberg@uky.edu](mailto:sarah.treberg@uky.edu); tel: 859-323-5803) about the Certificate in Clinical and Translational Science program.

The application process involves a completed application to the [Graduate School](#). Application materials include transcripts, a current curriculum vitae (CV) and two letters of support. Please note that there are specific instructions regarding letters of support and a link that should be sent to letter-writers. Additionally, applicants should prepare narrative responses to [questions](#) and upload to the personal statement section of the application. Applications are accepted for both the Fall and Spring semesters. All application materials for the Fall semester must be received by **May 1**. All application materials for the Spring semester must be received by **October 1**. ***Late or incomplete applications will not be considered until the following application cycle.*** Individualized consideration is given to how each applicant may contribute to the learning environment and to the profession, weighing and balancing the range of the criteria prioritized by the selection committee.

Following review of applications by the Admissions Committee, applicants will be notified of their status.