

University of Texas at Tyler

Scholar Works at UT Tyler

Catalogs

Institutional Records

2012

University of Texas Health Science Center at Tyler Graduate Bulletin, 2012 - 2013

University of Texas Health Science Center at Tyler

Follow this and additional works at: <https://scholarworks.uttyler.edu/catalogs>



Part of the [Education Commons](#)

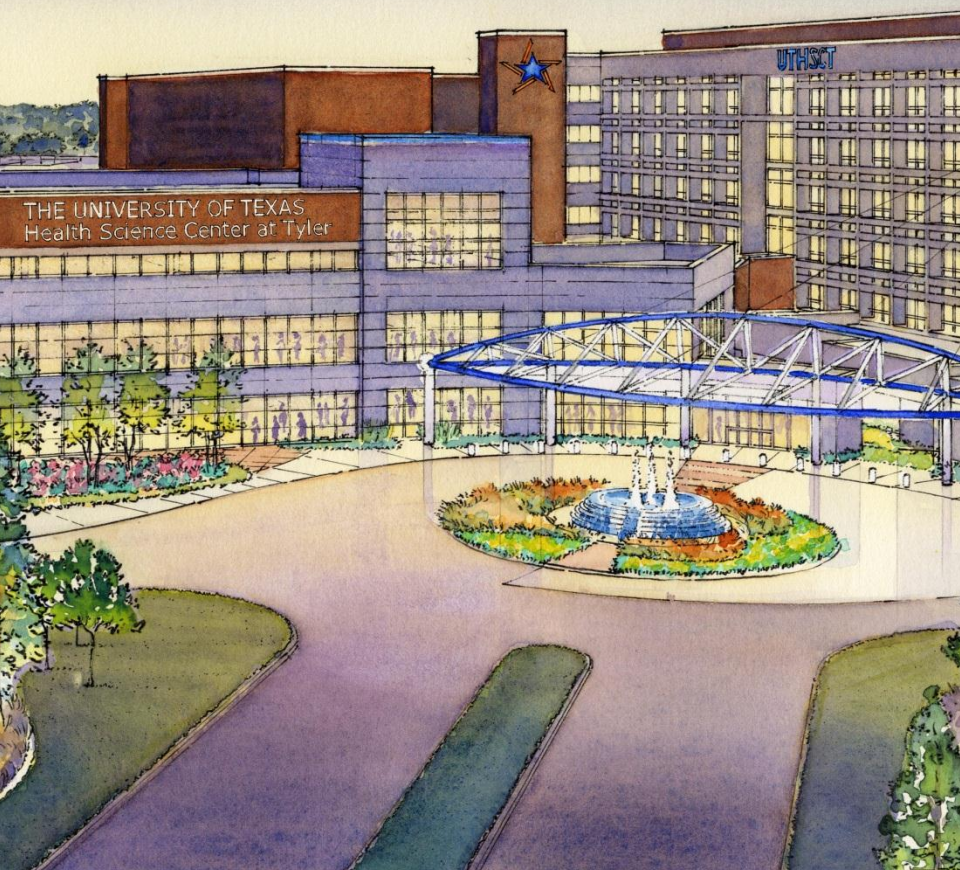
Recommended Citation

University of Texas Health Science Center at Tyler Graduate Bulletin, 2012-2013. UASC.UA.013, UTHSCT_GRAD_BULL_2012-2013, Registrar Records, University Archives and Special Collections, University of Texas at Tyler, Tyler, TX. <http://hdl.handle.net/10950/3742>.

This PDF is brought to you for free and open access by the Institutional Records at Scholar Works at UT Tyler. It has been accepted for inclusion in Catalogs by an authorized administrator of Scholar Works at UT Tyler. For more information, please contact tgullings@uttyler.edu.

UTHSCT GRADUATE BULLETIN

2012 - 2013



The University of Texas Health Science Center at Tyler

**11937 US Hwy 271
Tyler, TX 75708**



THE GRADUATE BULLETIN

The full text of all UTHSCT academic and governance policies may be found in the Institutional Handbook of Operating Procedures (IHOP). The University of Texas System Board of Regents' Rules and Regulations reflect the policy and regulatory guidance to which all UT System institutions are subject. The IHOP implements the rules of governance, in part derived from and/or governed by the Board of Regents' Rules and Regulations. In addition, many official policies and procedures that apply to students are described in the Graduate Bulletin.

This Bulletin is not intended to replace or supersede any of the above documents. Rather, it provides an overview of key issues, information, needed forms, and instructions frequently used by our students. It is intended to serve as an aide rather than the sole or definitive source of necessary information. In many cases, this Bulletin provides a summary and directs students to the appropriate documents for additional details.

This Bulletin is prepared and published by the Division of Research and Graduate Studies, UTHSCT.

STUDENTS ARE CHARGED WITH THE RESPONSIBILITY FOR KNOWLEDGE OF AND COMPLIANCE WITH ALL APPLICABLE UTHSCT AND UT SYSTEM POLICIES, REGULATIONS AND PROCEDURES, AS WELL AS THOSE FOR UTHSCT EMPLOYEES WHEN APPLICABLE.

Welcome from the Vice President of Research and Graduate Studies

Steven Idell, MD, PhD
*Vice President of Research
and Graduate Studies*



Greetings and welcome to The University of Texas Health Science Center at Tyler and our new graduate program!

This is truly an exciting time at UTHSCT as we begin offering our first degree program—a *Master of Science in Biotechnology*. What began in 1996 as a collaborative partnership with Stephen F. Austin State University (SFA) has now grown into an independent program. While still maintaining close ties to SFA, our program will focus more on *medical* biotechnology to meet growing demands in the biotechnology and pharmaceutical workforces.

Our Biotechnology program consists of research & teaching faculty with PhD and/or MD degrees performing nationally-recognized/funded biomedical research in competitive and relevant fields. All use various biotechnology techniques in their labs and are eager to teach, guide, challenge and encourage you throughout your studies. Take advantage of all we have to offer, right here on our beautiful campus.

I invite you to come and be a part of this exciting new program, to challenge your potential and to achieve your career goals!

A handwritten signature in dark ink, reading "Steve Idell". The signature is fluid and cursive.

Steven Idell, MD, PhD

*Vice President of Research and Graduate Studies
& Dean of the School of Medical Biological Sciences*



Table of Contents

Welcome	<i>iii</i>
Administration	1
UT System Board of Regents.....	1
<i>Officers</i>	1
<i>Members</i>	1
<i>Standing Committees</i>	1
The University of Texas System Administration	2
UTHSCT Administration	2
The University	4
History	4
Location	5
Mission, Vision and Values	5
Admission to Graduate Degree Programs	6
Types of Admission	6
<i>Clear admission</i>	6
<i>Probationary admission</i>	6
<i>Provisional admission</i>	7
<i>Post-baccalaureate admission</i>	7
How to Apply	8
Admission Examinations	8
<i>Graduate Record Examination (GRE)</i>	9
<i>Test of English as a Foreign Language (TOEFL)</i>	9
Transfer of Credit.....	10
Procedure after Admission	10

Master's Degree Program Policies	10
Thesis Preparation	10
<i>Microfilming and Copyrighting of Theses.....</i>	<i>11</i>
Degrees, Diplomas and Transcripts	11
Grades.....	12
Limitation of Time.....	13
Withdrawal from the University	13
Student Course Loads	14
Probation, Suspension and Readmission	15
Adding, Dropping and Auditing Courses	15
Graduate Student Handbook	15
Tuition and Fees	16
Tuition and Fee Schedule.....	16
Auditing	17
Payment Deadlines	17
Late Registration and Late Course Addition Fees	19
Reinstatement Fee.....	19
Graduation Fee	19
Thesis and Dissertation Fees.....	20
Housing	20
Parking	20
Delinquent Accounts	20
Installment Payment Plan	21
Students' Residency Status and Classification	22
<i>General definition of residency</i>	<i>22</i>

<i>Exceptions for non-residents</i>	23
Exemptions and Waivers of Tuition and Fees	24
Refund of Tuition and Fees	26
<i>Withdrawal Refunds</i>	26
<i>Dropped Course Refunds</i>	27
Financial Aid	27
Research Assistantships	27
Cobb Scholarship	28
Student Affairs and Services	28
Library	28
Bookstore.....	29
Campus Computing.....	29
Health Services	30
Food Services	30
Campus Safety	30
Student Center.....	31
Academic Advising	32
Student Activities	32
Career Planning.....	32
Counseling	33
Student Accessibility Services	33
Academic Calendar	34
Campus Map	35
University Policies	36
Student Conduct	36
Academic Integrity	36

<i>Cheating</i>	36
<i>Plagiarism</i>	37
<i>Disciplinary Procedure</i>	37
Student Complaints and Appeals.....	38
University Property	39
Sexual Harassment	39
Acceptable Use of Computers	39
Illegal Drug Use	40
Student Right-to-Know Act	40
School of Medical Biological Sciences	42
Department of Cellular and Molecular Biology	42
<i>UTHSCT Master's Degree in Biotechnology</i>	46
<i>Courses in Biotechnology</i>	50
Department of Microbiology	55
Department of Immunology (CPIDC)	56

Administration

UT System Board of Regents

Officers

Wm. Eugene "Gene" Powell, *Chairman*

Paul L. Foster, *Vice Chairman*

R. Steven "Steve" Hicks, *Vice Chairman*

James D. Dannenbaum, P.E., *Vice Chairman*

Francie A. Frederick, *General Counsel to the Board of Regents*

Members

Terms expire February 2013:

Paul L. Foster	El Paso
James D. Dannenbaum, P.E.	Houston
Printice L. Gary	Dallas

Terms expire February 2015:

Wm. Eugene "Gene" Powell	San Antonio
R. Steven "Steve" Hicks	Austin
Robert L. Stillwell	Houston

Terms expire February 2017:

Alex M. Cranberg	Austin
Wallace L. Hall Jr.	Dallas
Brenda Pejovich	Dallas

Student Regent, Term expires May, 2012: John Davis Rutkauskas (Dallas)

Standing Committees

Academic Affairs Committee

Audit, Compliance and Management Review Committee

Facilities Planning and Construction Committee

Finance and Planning Committee

Health Affairs Committee

The University of Texas System Administration

Chancellor — Francisco G. Cigarroa, MD

Executive Vice Chancellor for Academic Affairs — David B. Prior, PhD

Executive Vice Chancellor for Business Affairs — Scott C. Kelley

Executive Vice Chancellor for Health Affairs — Kenneth I. Shine, MD

UTHSCT Administration

<i>President</i>	Kirk A. Calhoun, MD
------------------	---------------------

<i>Executive Vice President and Chief of Staff</i>	Joe Woelkers
--	--------------

<i>Vice President of Clinical and Academic Affairs</i>	David Coultas, MD
--	-------------------

<i>Vice President of Research and Graduate Studies</i>	Steven Idell, MD, PhD
--	-----------------------

<i>Vice President of Administration & Operations, COO</i>	Rob Marshall
---	--------------

<i>Vice President of Finance and CFO</i>	Vernon Moore
--	--------------

<i>Vice President of Development</i>	Mac Griffith
--------------------------------------	--------------

<i>Dean of the School of Medical Biological Sciences</i>	Steven Idell, MD, PhD
--	-----------------------

<i>Dean of the School of Community Health & Health Professions</i>	Jeff Levin, MD
<i>Director of Academic Administration</i>	Gail Weatherly, PhD
<i>Director of Compliance</i>	Donna Martin
<i>Chief Human Resource Officer</i>	Georgia Melton
<i>Director of Internal Audit</i>	Kris Kavasch
<i>Director of Library Services</i>	Tom Craig
<i>Director of Public Affairs</i>	Rhonda Scoby
<i>Director of Plant Operations</i>	Craig Craft
<i>Chief of Police</i>	Robert Cromley
<i>Director of the Graduate Program in Biotechnology</i>	Michael Pangburn, PhD
<i>Bursar's Office</i>	UTHSC Houston
<i>Registrar's Office</i>	UTHSC Houston
<i>Student Services</i>	UT Tyler

The University

History

The site where the University of Texas Health Science Center at Tyler (UTHSCT) stands today – 614 acres located northeast of Tyler, Texas – is rich in history. Activated in 1943 as Camp Fannin, a World War II infantry-training base, more than 100,000 men were prepared for combat. During the height of the war, troop capacity was slightly over 18,000 soldiers. The camp hospital had 1,074 beds. The camp also served as a prisoner of war camp.

The genesis of UTHSCT was established in 1947, when the 50th Texas Legislature chartered it as the East Texas Tuberculosis Sanatorium. It was later designated the East Texas Tuberculosis Hospital and in 1971 the 62nd Texas Legislature renamed the institution the East Texas Chest Hospital and designated it a primary referral facility in Texas for treatment of pulmonary and heart disease. In 1977, the institution joined The University of Texas System, becoming The University of Texas Health Center at Tyler. The late State Sen. Peyton McKnight of Tyler sponsored a bill that transferred the East Texas Chest Hospital from the Texas Department of Health to the UT System. The primary mission of this academic medical center—governed by the UT System Board of Regents—was three-fold: patient care, research, and education in the treatment of pulmonary and heart disease.

In the area of education, a Family Practice Residency Program opened in 1985. It was the first graduate-level medical training program in East Texas. With support from the Texas Chest Foundation, the Texas Asthma Camp for Children also began in 1985, and continues today as the oldest, largest asthma camp in the state. In 1993, the 73rd Texas Legislature established the Center for Pulmonary and Infectious Disease Control (CPIDC) on the Health Center campus. An Occupational Medicine Residency Program began in 1995, and the university partnered with Stephen F. Austin State University to offer master's degrees in both environmental science and biotechnology. In 2005, to further its educational mission, the 79th Texas Legislature gave UTHSCT degree-granting authority. This was followed in 2008 by the UT System Board of Regents approving the addition of "Science" into the institution's name to officially become The University of Texas Health Science Center at Tyler.

Location

Tyler, a city of approximately 96,000, offers a variety of activities from rural pastimes to urban attractions and cultural enrichment. Located in the Piney Woods of East Texas, it has a diversified economy based on oil and gas, manufacturing, and the health care industry. The city is recognized as having an excellent school system and is proud of its higher education facilities. Affordable housing is abundant whether you are in the market for an older home in an historic neighborhood, a comfortable suburban home, or a ranch in the country. The temperate climate permits a variety of year-round recreational activities. Golfing, tennis, fishing, camping, and hiking opportunities are plentiful. Water sports and boating are favorite pastimes on the numerous lakes in the area. Tyler is an ideal family community for people who desire a safe, clean environment and a healthy lifestyle.

Mission, Vision and Values

Mission

"To serve East Texas and beyond through excellent patient care and community health, comprehensive education, and innovative research."

Vision

We will be a great institution, unified in common purpose, to benefit human health and to improve quality of life.

Values

- **Excellence:**
We will work every day to improve UTHSCT and the job that we do.
- **Servant Leadership:**
We will put the needs of our patients and our co-workers first.
- **Diversity:**
We will respect and appreciate diversity in ideas, people, and cultures.
- **Accountability:**
We will use the resources of UTHSCT wisely.

Admission to Graduate Degree Programs

Specific admission requirements for each graduate program are under the control of the department offering the degree. All students seeking admission to a graduate program should consult directly with the graduate program office in the department in which they wish to study for specific admission criteria.

Types of Admission

Generally, four types of admission exist: (1) *Clear admission*, under which the student is eligible to work toward a graduate degree; (2) *Probationary admission*, under which the student is eligible to work toward a graduate degree but with the provision that the student earn a B average on course work the first semester or summer session of registration or be placed on academic suspension; (3) *Provisional admission*, under which an individual is permitted to take graduate courses for one semester only, under the provisions described below; and (4) *Post-baccalaureate admission*, under which the student already holding a bachelor's or master's degree is eligible to take graduate courses but may apply only a limited number of these courses toward a graduate degree.

Clear admission

In order to be granted clear admission to a degree program, an applicant must have an overall undergraduate grade point average of 2.5 on a 4.0 scale and a 2.8 on the last 60 hours of undergraduate work, exclusive of freshman level courses. In all cases, an applicant must be recommended for admission to a graduate degree program by the major department and the appropriate academic dean. No applicant will be granted clear admission until all official transcripts and GRE or TOEFL scores, if required, are received by the graduate program.

Probationary admission

An applicant failing to achieve clear admission to graduate study may be considered for probationary admission by having an overall grade point average of 2.3 on a 4.0 scale and consent of the program advisor. The departmental graduate program adviser may require test scores and/or a

combination of other factors, such as professional experience, to meet the requirements for probationary admission.

Provisional admission

For all graduate degree-seeking students, applicants unable to supply all the required documentation prior to the first semester of enrollment, but who, based on previous academic performance, appear to meet the requirements for clear admission, may be considered for provisional admission. This status requires the recommendation of the appropriate department and the approval of the dean. It is valid for one regular semester or two summer sessions only.

Complete and satisfactory credentials must be received by the graduate program and reviewed prior to the beginning of the following semester of work. If this does not occur, the person will not be permitted to continue as a degree-seeking student. A maximum of 12 hours of graduate level course work taken under provisional status may be applied toward a degree.

A student granted provisional admission may be considered for an assistantship or other form of financial support for one regular semester or two summer sessions only under this status.

Post-baccalaureate admission

A student already holding a baccalaureate or graduate degree may be admitted to graduate study on post-baccalaureate status. On this status a student may take courses for the purpose of qualifying for a graduate degree program, professional development or personal enrichment. There are restrictions and limitations on the application of post-baccalaureate hours toward a graduate degree. Upon gaining admission to a degree program and with the approval of the graduate adviser, the department chair and the dean, the post-baccalaureate student may apply a maximum of 6 credit hours earned with grades of B or better to a thesis program or 12 credit hours earned with grades of B or better to a non-thesis program.

To be considered for admission to post-baccalaureate study, the applicant must present proof of holding at least a bachelor's degree from a regionally accredited institution. A GRE score is not required, but may be required if the

student decides to later apply for regular admission.

How to Apply

Graduate applications for admission are available on the UTHSCT website (<http://www.uthct.edu>). Official transcripts from each college/university attended must be sent to the graduate program office at least 30 days prior to entering. UTHSCT will accept credit or recognize degrees only from institutions accredited by one of the regional accrediting bodies.

An applicant must present General Test scores on the Graduate Record Examination (GRE) of at least 900. An applicant whose native language is not English must also present satisfactory scores on the Test of English as a Foreign Language (TOEFL) (See description of the TOEFL elsewhere in this bulletin.) Applicants need to score at least 550 on the paper-based TOEFL, 213 on the computer based TOEFL, and 80 on the internet-based TOEFL.

An applicant for admission to graduate study must either (1) be in the final year of undergraduate work, or (2) hold a baccalaureate degree from a regionally accredited institution. An applicant admitted to a graduate program at UTHSCT must enroll within one calendar year of admission. Thereafter, the applicant must reapply for admission.

The application process will be conducted in accordance with the requirements of the Admission and Scholarship Policies for Graduate and Professional Programs, which was adopted by the 77th Session of the Texas Legislature, and which amends Chapter 51 of the Texas Education Code.

Application Fees

A \$25 application fee is to be included with the application materials. A fee of \$50 must accompany the application of all foreign applicants, except those under university-sponsored exchange programs.

Admission Examinations

Graduate degree programs at UTHSCT require the student to take the General Test of the Graduate Record Examination (GRE). Each applicant is individually responsible for making arrangements for taking the General Test of the GRE

and for having the scores sent to the appropriate program office as listed in this Bulletin.

Graduate Record Examination (GRE)

The General Test of the GRE is an objective and written essay examination requiring approximately three to four hours and yielding three scores-Verbal Factor (vocabulary and reading comprehension); Quantitative Factor (logical mathematical reasoning); and Analytical Writing. All of the Graduate Record Examinations, of which the General Test is merely one, are prepared and scored by the Educational Testing Service, P.O. Box 6000, Princeton, N.J., 08541-6000.

The General Test of the GRE is available through the Computer-Based Testing (CBT) Program of the Educational Testing Service. There are CBT test centers located throughout the United States, U.S. territories, Puerto Rico and Canada. The CBT Program is also offered outside the United States.

The applicant may register for the GRE by calling the GRE registration number, 1-800 473-4373 to schedule an examination date. Under the CBT Program, the examinee is able to view the scores of the verbal and quantitative sections immediately. Paper score reports are available to the examinee and the designated score recipients approximately 15 days after the test date.

Information about the GRE, as well as how to register, is available from the Educational Testing Service. For general inquiries, the Educational Testing Service can be contacted by phone (1-609-771-7670), by Fax (1-610-290-8975), by e-mail (gre@ets.org), or by Internet www.gre.org

Test of English as a Foreign Language (TOEFL)

Applicants whose native language is not English are required to submit evidence to demonstrate competency in the English language sufficient to function successfully in graduate work. They may do so by submitting results from the Test of English as a Foreign Language (TOEFL). The TOEFL is given in both a computer-based or internet-based test. Information concerning the TOEFL, including application forms and testing stations and dates may be secured from UTHSCT or from the Educational Testing Service, P.O. Box 6151, Princeton, N.J. 08541-6151 or at www.ets.org

Transfer of Credit

Under certain circumstances, a graduate student may transfer from 6 to 12 semester hours of graduate course work taken at accredited institutions. The student pursuing a master's degree with thesis may transfer a maximum of 6 semester hours; a student pursuing a master's Degree without thesis may transfer a maximum of 12 semester hours. To transfer any credit from other institutions, however, the student must submit an official transcript of the courses to be considered and have the approval of the appropriate academic department and academic dean. The work must have been taken not earlier than six years prior to the student's first graduate enrollment at UTHSCT. Moreover, if the student fails to complete work on the graduate degree at UTHSCT before the expiration of the six years, the transfer credit will not be applicable toward a degree here. Any course accepted by transfer will carry credit but not grade point value. Moreover, to transfer credit, the student must have earned a grade of B or higher on the course.

Procedure after Admission

Following admission to a graduate degree program, a student must confer with a graduate adviser in the major department to obtain advice about the courses to take. As soon as possible and preferably during the first semester or summer session of enrollment, a student should have a degree plan made by the graduate advisor in the major department.

Other program requirements may differ between programs and are described individually later in this bulletin. *Please refer to the section describing your degree program of interest to obtain more-specific information.*

Master's Degree Program Policies

Thesis Preparation

The initial step in establishing an advisory committee is to select a thesis director. With the advice and approval of this director, a thesis topic should be selected as soon as possible. Following completion of these steps, the balance

of the committee can be formed; a thesis proposal completed, and registering for the thesis courses can be made. Following the initial enrollment in a thesis course and until the thesis is defended; a student must continue to register each fall, spring, and summer semester during which the university's resources (faculty, library, laboratories, etc.) are being utilized.

Microfilming and Copyrighting of Theses

All theses and abstracts completed by graduate students at UTHSCT are sent to University Microfilms, of Ann Arbor, Mich., for microfilming to be available worldwide. A required fee of \$55 is charged for master's thesis and \$65 for doctoral dissertation. University Microfilms publishes all master's thesis abstracts in Master's Abstracts that is distributed on a subscription basis. The abstract of a given thesis is restricted to 150 words. Mathematical formulas and other illustrated materials in the abstract are equated to the number of words that will occupy the space in determining its length. The author retains the right to publish all or any part of the thesis by any means at any time, except by reproduction from a negative microfilm.

The author wishing to register a copyright on a thesis must pay an additional fee of \$65. However, if the thesis contains extensive use of material copyrighted by another author, the author of the thesis must certify that the material is used with the written permission of the other copyrighted author.

Copy quality must be acceptable to the graduate program office. A limited number of copies can be typically secured through the graduate program office at no charge (typically no more than five). Additional copies can be obtained through various printing services in the local community (typically at 10 cents per page). The usual fee for binding is \$7.50 per volume. Shipping costs are calculated at \$2.50 per each copy to be shipped off campus after binding. The student initiates the process of microfilming, copyrighting and binding through the Watson W. Wise Library.

Degrees, Diplomas and Transcripts

Completion of all degree requirements listed in this Graduate Bulletin and within the time limitation specified qualifies a student for graduation. To graduate at a designated time, however, the student must apply for the

degree at the program office and pay all graduation fees. Following that and the commencement exercises, the degree and diploma will be conferred upon the student.

A student who has a reasonable possibility of completing degree requirements may apply for the degree and attend commencement exercises. The commencement program lists “candidates” for degrees. The appearance of a student’s name on the commencement program and the fact that the student attends the commencement exercises, however, is no guarantee that the degree and diploma will be conferred. To receive both degree and diploma, the student must satisfy all degree requirements within the specified time limits.

A student who applies for a degree and pays the graduation fee for a given commencement, but who fails to meet degree requirements, must reapply for graduation and pay graduation fees again.

Final official transcripts are issued only upon completion of all degree requirements. No transcript carrying graduate course credit will be issued to a student who has failed to be admitted to a UTHSCT graduate program. Students may obtain transcripts by contacting the Registrar through our website (www.uthct.edu).

Grades

A –Excellent	WP – Withdraw Pass
B –Average	WF – Withdraw Fail
C –Fair	WH – Withheld
F – Fail	I – Incomplete
P – Pass	

A grade of A for a semester gives the student four grade points per semester hour; B, three grade points per semester hour; and C, two grade points per semester hour.

A grade of WH is assigned only when the completion of the work is not possible because of circumstances beyond the control of the student. In the case of the awarding of a WH grade, the work must be completed within a

calendar year or the grade automatically becomes an F. Exceptions to that regulation are thesis research and writing courses (BTC 589 and BTC 590) in which the work is permanently awarded a WH grade until the thesis is completed. A student may not receive a grade of WH upon dropping a course.

To graduate, a student may not discard any courses in the major or the minor in order to improve the grade point average.

All courses, except those repeated, in the major and minor are computed in the grade point average. No course with a grade below C can be used to satisfy degree requirements. A student may repeat a maximum of six semester hours of work to raise the grade point average. In the case of these repeated courses, the higher grades only will be used in the computation of grade point averages, according to university policy.

Electives may be taken outside the major and minor, and only those selected to complete the degree will be counted in the grade point average.

Limitation of Time

All work on a graduate degree must be completed within six years of the time the student first enrolls in graduate courses, whether the courses are taken here or elsewhere. In the case of the student who serves on active duty with the armed forces of the United States between the dates of matriculation and graduation, the six-year limitation will be extended one year for each year of active duty up to a maximum extension of four years.

Withdrawal from the University

A student who withdraws from a course after the date stipulated in the published academic calendar (elsewhere in this bulletin) will receive a grade of WP, if passing, or WF, if failing. No student may drop a course after the terminal date stipulated in the calendar. A student who ceases to attend classes without officially withdrawing from the courses or the university is subject to being awarded a grade of F in such courses. Application for withdrawal from a course or from the university must be initiated with the program office or the Registrar. A student discontinuing courses without permission or persisting in continued absence from duties, either in study or

research, may be withdrawn from the university at the discretion of the academic dean. In such an instance, the student is subject to being awarded grades of F in all courses.

Any student who withdraws from or otherwise leaves the university without clearing his/her financial record, *i.e.* without having returned borrowed books and equipment, paid any outstanding university traffic fines, and settled other financial matters with the university, will be subject to the following sanctions until such time that the record is cleared.

1. The student will not be permitted to re-enroll.
2. The student will not be eligible to receive a transcript of academic work completed.
3. The student will not be permitted to graduate.

Student Course Loads

A full load for a graduate student during a semester is 9 semester hours, and the maximum load is 15 semester hours. A full load during a six-week summer session is three semester hours and the maximum is six hours. A student in a thesis program must register for Advanced Graduate Studies (BIOT 5331 [BTC 575] or BIOT 5332 [BTC 576]), Thesis Research (BIOT 6331 [BTC 589]) or Thesis Writing (BIOT 6332 [BTC 590]) for each semester during which the resources of the university (faculty, library, labs, etc.) are utilized.

Credit for master's degree thesis research and writing courses, however, is awarded only one time, and enrollment in these courses is not counted in determining the maximum course load for a semester or summer session. Credit for doctoral dissertation research and writing courses is variable.

A student on a graduate assistantship during a semester is required to enroll for a minimum of 6 semester hours of graduate work (to be considered a full-time enrolled student). Should a graduate assistant fall below the 6-hour minimum for a semester, he or she will not be eligible for an assistantship the following semester. Graduate assistantships are usually limited to four semesters.

Probation, Suspension and Readmission

To remain in good standing in graduate school and to graduate, a student must maintain a 3.0 on a 4.0 scale (B average). During any semester or summer session that the grade point average falls below a B, the student with clear admission to graduate study will be placed on academic probation; the student with probationary admission will be placed on academic suspension. A student placed on academic probation and failing to restore an overall 3.0 (B) average the following semester or summer sessions will be placed on academic suspension. A student placed on academic suspension is denied the continuation of an academic program as well as the privilege of registering for course work. This suspension period is for one semester or one summer session, whichever follows the period after which the suspension occurred.

Thereafter, the student will revert to post-baccalaureate admission status and will be permitted to take course work not applicable toward a degree program. To be reinstated to a degree program, the student must be recommended by the appropriate academic department and approved by the appropriate academic dean as well as the Academic Council.

Adding, Dropping and Auditing Courses

Deadlines for adding or dropping courses and for all other registration procedures are shown by semester or summer session in the published academic calendar shown elsewhere in this bulletin. Auditing Courses Students may audit regular academic courses offered on campus on a space-available basis and with permission of the instructor. Only graduate students may audit graduate classes. Auditing gives the student the right to attend class but not to engage in discussion, take examinations or receive credit. Under no circumstances will a student be permitted to audit an individual study course. Audited courses are not shown on the transcript. (See the section on fees for the cost of auditing courses.)

Graduate Student Handbook

The Graduate Student Handbook, available on the UTHSCT Web site and provided to students at orientation, provides a guide to graduate study at UTHSCT and addresses other topics not included in this bulletin. Topics include

but are not limited to: getting started in graduate school, relationship with faculty, academic integrity, research integrity, graduate representation in university affairs and resources available to the graduate student. The incoming student should become familiar with the information contained in the Student Handbook.

Tuition and Fees

Tuition, fees and deposits as shown in this section are obligations of each student. Payment may be made by cash, check or money order payable to UTHSCT, or by Visa, MasterCard, American Express or Discover. Students are strongly encouraged to pay using our online payment system (www.uthct.edu).

Tuition charges at Texas state universities are established by state law. The 78th Texas Legislature (2003) allowed the Board of Regents of The University of Texas System to set designated tuition rates. The Texas Legislature does not set the specific amount for any particular student fee. Student fees assessed are authorized by state statute; however, the specific fee amounts and the determination to increase fees are made by the university administration and The University of Texas System Board of Regents.

Other expenses at UTHSCT are fixed within statutory limitations by the Board of Regents. The cost to attend UTHSCT varies with the individual student. The university reserves the right to change tuition and fees in keeping with acts of the Texas Legislature and/or policies of the Board of Regents.

Tuition and Fee Schedule

The schedule of fees presented in tabular format on the next page represents an estimated fee schedule for tuition and required fees. The tuition rate is based on \$50 per semester credit hour for Texas Residents and \$363 per semester credit hour for Non-Texas Residents. Required fees include an \$11 per semester credit hour Student Service Fee (\$150 maximum), a \$196 per graduate semester credit hour Designated Tuition Fee. A mandatory fee made up of \$30 Automated Service Fee, \$1 International Education Fee, \$125 Basic

Computer Access Fee, \$40 Recreational Facilities Fee, \$5 Records Fee, and a \$35 Medical Services Fee. In addition to the rates listed below, other fees may be assessed based on selected courses.

Auditing

Tuition for auditing is the same as those paid by regularly enrolled students. Individuals age 65 and older may audit at no charge on a space-available basis with permission of the instructor.

Payment Deadlines

For students who register during the Regular Registration period, full payment of current amounts due must be made by the due date designated in the published academic calendar. Prior to the first class day of the term, the university will drop unpaid students from classes, and current tuition and fee amounts will be removed from the students' accounts. Bills will not be mailed, but students will be notified by e-mail of billed amounts.



The University of Texas Health Science Center at Tyler

Graduate Program Student Tuition and Fee Schedule 2012-2013

# of Semester Hours	Texas Resident Tuition	Non-Texas Resident Tuition	Student Service Fee	Graduate Designated Tuition Fee	Automated Service Fee	International Education Fee	Computer Access Fee	Library Fee	Records Fee*	Medical Services Fee	Recreational Facilities Fee
1	\$50.00	\$363.00	\$11.00	\$196.00	\$30.00	\$1.00	\$125.00	\$2.00	\$5.00	\$35.00	\$40.00
2	\$100.00	\$726.00	\$22.00	\$392.00	\$30.00	\$1.00	\$125.00	\$4.00	\$5.00	\$35.00	\$40.00
3	\$150.00	\$1,089.00	\$33.00	\$588.00	\$30.00	\$1.00	\$125.00	\$6.00	\$5.00	\$35.00	\$40.00
4	\$200.00	\$1,452.00	\$44.00	\$784.00	\$30.00	\$1.00	\$125.00	\$8.00	\$5.00	\$35.00	\$40.00
5	\$250.00	\$1,815.00	\$55.00	\$980.00	\$30.00	\$1.00	\$125.00	\$10.00	\$5.00	\$35.00	\$40.00
6	\$300.00	\$2,178.00	\$66.00	\$1,176.00	\$30.00	\$1.00	\$125.00	\$12.00	\$5.00	\$35.00	\$40.00
7	\$350.00	\$2,541.00	\$77.00	\$1,372.00	\$30.00	\$1.00	\$125.00	\$14.00	\$5.00	\$35.00	\$40.00
8	\$400.00	\$2,904.00	\$88.00	\$1,568.00	\$30.00	\$1.00	\$125.00	\$16.00	\$5.00	\$35.00	\$40.00
9	\$450.00	\$3,267.00	\$99.00	\$1,764.00	\$30.00	\$1.00	\$125.00	\$18.00	\$5.00	\$35.00	\$40.00
10	\$500.00	\$3,630.00	\$110.00	\$1,960.00	\$30.00	\$1.00	\$125.00	\$20.00	\$5.00	\$35.00	\$40.00
11	\$550.00	\$3,993.00	\$121.00	\$2,156.00	\$30.00	\$1.00	\$125.00	\$22.00	\$5.00	\$35.00	\$40.00
12	\$600.00	\$4,356.00	\$132.00	\$2,352.00	\$30.00	\$1.00	\$125.00	\$24.00	\$5.00	\$35.00	\$40.00
13	\$650.00	\$4,719.00	\$143.00	\$2,548.00	\$30.00	\$1.00	\$125.00	\$26.00	\$5.00	\$35.00	\$40.00
14	\$700.00	\$5,082.00	\$150.00	\$2,744.00	\$30.00	\$1.00	\$125.00	\$28.00	\$5.00	\$35.00	\$40.00
15	\$750.00	\$5,445.00	\$150.00	\$2,940.00	\$30.00	\$1.00	\$125.00	\$30.00	\$5.00	\$35.00	\$40.00

* Non-refundable

For students who register, add or change classes during the late registration period (beginning with the first class day of the term), full payment of current amounts due must be made by the university's 20th class day in the long term and 15th class day in a summer term. Students enrolling for classes during the late registration period incur a financial obligation immediately and must officially withdraw from the university if they decide not to attend, even if they have not yet paid. Classes unpaid by the 20th class day in the long term and the 15th class day in a summer term will be dropped. Students will be subject to the university's refund policy for classes dropped for insufficient payment (see Refund of Tuition and Fees later in this section.)

Late Registration and Late Course Addition Fees

Each semester or term, student enrollment counts are taken on the "official census day" established by the state. These census dates are on the 12th class day for fall and spring semester and the 4th class day for summer terms. Students who register or add classes on or after the 1st day of the semester will incur additional fees.

NOTE: The normal last day to register is published each semester or term in the academic calendar. The last day to register is always prior to the census day. Enrollment or adding courses after the last day to register will be permitted only in extraordinary circumstances and at the university's sole discretion.

Reinstatement Fee

In extraordinary circumstances, the university, at its sole discretion, may allow a student to be reinstated in classes after the 20th class day. In this case a per credit hour reinstatement fee will apply. During summer sessions, the reinstatement fee will be incurred after the 15th class day. Students are advised to contact their program advisor to determine the total amount due for reinstatement.

Graduation Fee

Each time a student applies for a degree from the university he or she must pay a graduation fee. If the degree candidate plans to participate in

commencement exercises he or she may rent a cap and gown at the UT Tyler Bookstore on the UT Tyler campus. For additional information, contact the program office.

Thesis and Dissertation Fees

Graduate students at UTHSCT completing a thesis or dissertation as part of their degree requirements must pay the cost of binding, shipping and microfilming. Fees for these services may be found on the website as well as elsewhere in this bulletin.

Housing

Housing is neither provided by nor available through UTHSCT. Housing costs, availability, and other information is available through the program office, Human Resources or the Tyler Area Chamber of Commerce.

Parking

There is no fee for parking in designated lots on campus. However, all vehicles used on campus by faculty, staff and students must be registered with the UTHSCT Police Department and display official registration permits. Application forms for parking permits are available from the UTHSCT Police Department as are all regulations and policies governing violations and fines. Parking without a proper permit may result in fine, wheel lock or impoundment. Appeal application forms are available through the UTHSCT Police Department.

Delinquent Accounts

A student with a past due unpaid balance is considered delinquent. The delinquent student may not register for subsequent semesters, receive credit for work done that semester, receive grades and transcripts or add courses.

Delinquent accounts may be turned over to a collection agency. The student will be responsible for any charges associated with the collection of delinquent amounts.

Installment Payment Plan

In accordance with Tex. Ed. Code 54.007, tuition and fees for fall, spring, and summer semesters may be paid using one of two alternatives.

1. Full payment of tuition and fees, in advance of the beginning of the semester.
2. Partial payments as follows:
 - a. *Fall or Spring Semester (full semesters)*: One-half (1/2) of tuition and course-related fees, if applicable, plus the installment fee must be paid at the time of registration, one-fourth (1/4) on or before the 60th day of the semester, and one-fourth (1/4) on or before the 90th day of the semester.
 - b. *Summer Semester (of more than 30 days)*: One half (1/2) of tuition and course-related fees, if applicable, plus the installment fee must be paid at the time of registration, and one-half (1/2) on or before the 30th day of the summer semester.

All types of financial aid (*i.e.* federal, state and private) administered by the university to a student must be applied toward payment of the first installment and each subsequent installment in the order due.

Students choosing to pay tuition and fees in installments will be charged a \$15 non-refundable administrative fee. Students on the installment plan may pay their entire balance any time prior to the payment due date. However, there is no refund of the administrative fee once an installment payment has been made. The installment plan for fees applies to mandatory fees only. Optional and one-time fees are ineligible for the installment plan and must be paid in advance of the beginning of the semester.

The costs for courses added after the initial registration are payable under the same payment alternative as was originally selected. Likewise, any refunds for dropped courses are made in accordance with the originally selected payment alternative.

If enrollment is terminated for any reason, the unpaid balance of tuition and fees is due and payable immediately. Refunds for withdrawals are made in accordance with the regular refund schedule (see Refund of Tuition and Fees later in this section). Installment payments due will be deducted from the refund. The student is responsible for the immediate payment of any remaining balance due after the refund is applied. Students who fail to pay the balance in full will be considered delinquent.

The university will e-mail students notifying them prior to the second and third installment due dates. However, it is the student's responsibility to make all payments by the appropriate dates without regard to the university's billing procedures. Students who fail to make full payment by the due date will be placed on delinquency status and will incur late charges of \$25 for each missed payment date.

Any student electing the installment payment alternative must sign an installment contract or complete the installment contract available on the website.

Students' Residency Status and Classification

All students must, upon application to the university, complete a Certification of Texas Residency form (included in the application packet available online).

General definition of residency

While State requirements for establishing residency are complex and should be referred to in each particular circumstance, they generally require that an independent individual (18 years of age or older) establish a domicile in Texas and reside in Texas for a period of 12 months prior to the census date of the academic term in which the person is enrolled.

For minors and dependents, the parents or court-appointed legal guardian must have established a domicile and meet the above residency requirements. The minor or dependent must be eligible to be claimed by the parent or court-appointed legal guardian on their federal income tax. An individual may also be classified as a Texas resident if the individual (1) graduated from a public or private high school or received the equivalent of a high school diploma in

Texas; (2) resided in Texas for at least three years as of the date the person graduated from high school or received the equivalent of a high school diploma; and (3) continuously resided in Texas for one year prior to the census date of the academic term in which the person is enrolled.

Persons who are unable to meet the requirements above are classified as non-residents.

Registering under the proper residency classification is the responsibility of the student. If there is any question of his/her right to classification as a resident of Texas, it is his/her obligation to raise the question with the program office prior to registration.

Exceptions for non-residents

The law governing residence for tuition purposes is not the same as the law governing residence for voting, vehicle registration, etc. Various circumstances can affect a student's residence status for tuition purposes: *i.e.* death or divorce of parents, custody of minor by court order, and active military duty of student or student's parents.

Listed below are some exceptions that permit non-residents to pay resident tuition rates. All special tuition exceptions must be approved through the program office prior to registration each term.

- A non-resident or foreign student employed at least half-time in a program-related position such as teaching assistant or a research assistant is entitled to pay the same tuition as a resident of Texas. The student's spouse and children may also be enrolled under this classification.
- A non-resident or foreign student holding a competitive academic scholarship of at least \$1,000 for the academic year in which he/she enrolled is entitled to pay the same tuition as a resident of Texas provided he/she competes with other students including Texas residents for the scholarship and the scholarship is awarded by a scholarship committee recognized by UTHSCT and approved by the Texas Higher Education Coordinating Board.

- Usually, a member of the United States military forces is entitled to pay the resident tuition fee for self or dependents. The student must submit appropriate evidence including a statement from his/her commanding officer stating that the member is currently on permanent active duty assignment within the state of Texas.
- Students who reside in Arkansas, Louisiana, and Oklahoma may be charged the statutory rate for Texas residents, plus \$30.00 per semester credit hour. Students must demonstrate residency by providing a current driver's license or copies of their state tax returns for the current year. This must be presented each semester prior to payment of tuition and fees.

The Texas Education Code, §54.058 et seq. includes other exceptions not reprinted in this bulletin. For more information consult the cited statutes, the graduate program office, or refer to the Texas Higher Education Coordinating Board's website, <http://www.collegefortexans.com>.

Exemptions and Waivers of Tuition and Fees

Certain students are exempt from paying tuition and some of the required fees by state law. Specific eligibility requirements under these provisions can be obtained from the program office. Applications for exemptions must be completed prior to registration for the semester. Exempt classifications include the following:

- a. Residents of the State of Texas who were classified as Prisoners of War on or after January 1, 1999 and were Texas residents at the time they entered the armed services are exempt from tuition, required fees and other expenses related to attending the university.
- b. Residents of the State of Texas who are children of Prisoners of War or Persons Missing in Action are exempt from paying all tuition and required fees.
- c. Blind and/or deaf students eligible for the rehabilitation services of the State Commission for the Blind and/or the Division of Vocational

Rehabilitation of the Texas Education Agency are exempt from all tuition and fees.

- d. Minor children and surviving spouses of firemen; peace officers, municipal, county or state peace officer or game warden disabled or killed-on-duty may be exempt from paying tuition and fees, and other expenses related to attending the university.
- e. Hazelwood Act benefits:
 - 1. Veterans (and dependents of veterans who died in active service) of World War I, World War II, Korean War and certain other qualified veterans who have no remaining veterans' administration educational benefits may be eligible for Hazelwood Act benefits for up to 150 credit hours if residents of Texas at the time they entered the armed forces, resided in Texas 12 months prior to enrolling in a Texas education institution and received an honorable discharge from the service.
 - 2. Orphans of members of the U.S. armed forces, Texas National Guard and the Texas Air National Guard killed since January 1, 1946, while on active duty either in the service of their state or the United States, may also be eligible under this provision. In order to qualify for benefits under the Hazelwood Act, the veteran must file with the graduate program office prior to registration each semester.
 - 3. Children of members of the armed forces, the Texas National Guard, or the Texas Air National Guard who became totally disabled as a result of a service-related injury.
- f. Certain dependent children or step children of a member of the U.S. Armed Forces may qualify for an exemption of resident tuition only during the semester in which the member of the armed forces is deployed on active duty for the purpose of engaging in a combative military operation outside the United States. Deployment

documentation must be provided to the program office.

- g. Residents of the State of Texas who are 65 years of age or older may audit courses without paying the regular audit fees, providing class space is available.
- h. Residents of the State of Texas who are 65 years of age or older may enroll in the fall, spring, and summer semesters and receive an exemption for the cost of tuition for up to six hours each semester.
- i. Residents of the State of Texas who are school employees who have worked as an educational aide for at least one school year within the last five years, are enrolled in teacher certification courses and can establish financial need may be eligible for exemption of tuition and certain fees.
- j. Individuals who were in foster care or other residential care under the conservatorship of the Department of Protective and Regulatory Services should contact the program office to determine if they qualify for tuition and fees exemption.
- k. Certain members of the Texas National Guard may be exempt from tuition and mandatory fee for up to 12 semester credit hours.
- l. Adopted children who were formerly in foster or other residential care are exempt from tuition and fees.

Refund of Tuition and Fees

Sec. 54.006 Texas Education Code

Withdrawal Refunds

A student officially withdrawing from the university is eligible for refund of tuition and certain fees according to the following schedule:

- **Regular Semesters (fall and spring)**

1. Prior to first class day*	100%
2. During the first 5 class days	80%
3. During the second 5 class days	70%

- | | |
|-----------------------------------|-----------|
| 4. During the third 5 class days | 50% |
| 5. During the fourth 5 class days | 25% |
| 6. After the fourth 5 class days | No refund |

- **Summer Term**

- | | |
|---|-----------|
| 1. Prior to first class day* | 100% |
| 2. During the first, second, or third class day | 80% |
| 3. During the fourth, fifth or sixth class day | 50% |
| 4. Seventh day of class and thereafter | No refund |

**A student officially withdrawing from the university prior to the first class day will be assessed a matriculation fee of \$15.*

Full refund of tuition and fees will be made if withdrawal is due to death or transfer under military orders.

Dropped Course Refunds

A student dropping a course within the first 12 class days of a regular semester or the first four class days of a summer term is eligible for a full refund of applicable tuition and fees for the course dropped, provided the student remains enrolled at the university for that semester or term.

Financial Aid

UTHSCT offers financial assistance to graduate students in the form of scholarships and assistantships. Students may apply for both types of financial aid but are only eligible to receive one or the other, they cannot receive both.

Research Assistantships

The Graduate Program in Biotechnology at UTHSCT has a limited number of graduate assistantships for students in the Master's Program in Biotechnology. Assistantship awards are in the amount of \$12,600 per year paid in 26 installments. Applications can be found on the UTHSCT website.

In order to be considered for a Research Assistantship, a student must:

1. Be pursuing a Master of Science degree in Biotechnology at UTHSCT.
2. Have completed all prerequisite requirements.
3. Be admitted to the UTHSCT graduate program.
4. Be enrolled as a full time graduate student (9 hours of graduate course work in the fall or spring semesters or 6 semester hours in a summer session or be conducting thesis research as their primary activity).
5. Agree to be a teaching assistant for at least one course, each fall and spring semester.

For second year assistantships, the student also must:

1. Have satisfactorily completed a minimum of 18 hours the first year.
2. Have selected a major advisor at UTHSCT.
3. Have submitted thesis proposal.
4. Have submitted an approved degree plan.
5. Have applied for admission to candidacy.
6. Be enrolled in Thesis Research (BIOT 6331 [BTC 589]) and spend at least 20 hours a week doing research.

Cobb Scholarship

The Rupert & Phoebe Lou Cobb Memorial Scholarship is open to both part time and full time students who are enrolled in the Biotechnology graduate program. Scholarship awards are up to \$3,000 per semester and students must apply each semester for the scholarship. Applications can be found on the UTHSCT website or are available from the program office.

Student Affairs and Services

Library

The Watson W. Wise Medical Research Library was dedicated in 1984 as an expansion and enhancement of the existing clinical library that was begun

several years before. With UTHSCT's initial emphasis in patient care, research, and education in chest diseases, the Library remains an excellent source of information on diseases of the lung. However, Mr. Wise's contribution and the continued expansion of the UTHSCT mission and programs has resulted in a collection that is also strong in cardiology, biochemistry, molecular biology, primary care, occupational medicine and biotechnology.

The Library serves not only students, but UTHSCT physicians, research faculty, nurses, administrators, and other staff as well. In addition, area professionals and the general public use the Library, which remains the only professionally staffed health science library in East Texas.

The Library maintains a collection of over 4,000 periodicals, mostly in electronic format, and 2,400 books. Public-access microcomputers are also available for database and web searching, word processing, presentations, and more. Library staff is available to provide assistance. Students, faculty and staff also have remote access to electronic information resources 24 hours a day, 7 days a week.

Bookstore

Bookstore services, including graduation products, are available and may be ordered through the bookstore at UT Tyler, accessible from a link on the UTHSCT Student Affairs website.

Campus Computing

Information Technology (IT) is responsible for maintaining the availability, functionality and security of the university's administrative computer systems, wired and wireless campus network infrastructures, wide-area network communications, private intranet portal, e-mail services, and telephone system. IT also provides computer repair services and help desks for students and faculty/staff.

Electronic access to informational resources is available in student laboratories as well as the library. UTHSCT provides all students with robust, personalized software tools, a high-performance network, and a secure UTHSCT e-mail account.

Health Services

UTHSCT provides health services to all enrolled students through a Student Health fee collected along with their tuition. Health services are provided through UTHSCT's Family Practice Clinics on campus and also at the Health Clinic on the UT Tyler campus. The UTHSCT clinics provide a wide variety of services to include Family Medicine, Adolescent Medicine, Travel Medicine, Aviation Medicine, Sports Medicine, and Geriatric Medicine. These clinics are open Monday-Friday, 8am -5pm. Physicians are on call 24 hours 7 days per week.

All students without proof of insurance must enroll in a student health plan contracted by and coordinated through the UT System. Prior to the start of the 2013 academic year, details of the plan and a brochure describing the service available through the UT System can be accessed at www.uhcsr.com/utsystem. The 2012 United Health Care Brochure for current UT campus sites provides a full description of the Student Injury and Sickness Insurance Plan, including cost, benefits, exclusions, any reductions and limitations, and the terms under which the coverage may remain in force. Students may purchase the plan through a single payment or by monthly installments.

Food Services

Although UTHSCT does not offer a food service plan, The Blue Star Café, located on the first floor off the main hospital building (see campus map elsewhere in this bulletin) is available for students and offers a variety of foods at employee-discounted prices. Blue Star Café Hours are 6:30 am to 10:00 am for breakfast, 11:00 am to 3:00 pm for lunch, and 4:00 pm to 6:00 pm for dinner. There is also a Coffee Kiosk located in the Riter Center lobby that is open from 7:00 am to 1:30 pm Monday through Friday.

Campus Safety

The mission of the UTHSCT Police Department is to provide a safe and secure campus for members of the university community, emergency services and needed community services while maintaining a well-trained and efficient work force.

Under the authority of Article 51.203 of the Texas Education Code, UTHSCT police are commissioned peace officers with primary jurisdiction over all counties wherein property is owned, leased, rented or otherwise under the control of the University of Texas. UTHSCT police officers are armed and are most often in uniform establishing visibility in the campus community, and to act as a deterrent against crime. All reported criminal incidents occurring upon the UTHCT campus are investigated by UTHCT officers within a cooperative relationship maintained with local municipal police agencies, county sheriff's departments, FBI and the Texas Department of Public Safety.

Other services provided by the UTHSCT Police Department are: lost and found, daily crime log, vehicle assists, safe-walk escorts, id badges, parking permits, locks and unlocks (building access).

Student Wellness

UT Tyler administers a variety of Student Wellness Activities which are available to UTHSCT students. Core elements of the program include group and individual health and wellness education and recreation. Through a Recreation Facility fee of \$40 per semester, students have access to the Herrington Patriot Center, which houses a heated recreation and therapy pool and a 6,340 square feet fitness center with pin-selector exercise machines, free-weights, plate-loaded machines, treadmills, racquetball courts, and an overhead walking track.

Student Center

UTHSCT students have access to multiple areas for lounging and congregation within the instructional areas that provide a place for students to meet, rest, and relax. Lounges in both the Biomedical Research Center and the future Academic Center are or will be equipped with comfortable seating, tables and other amenities. The Biomedical Research Center lounge area includes vending machines, refrigerators, and microwaves. The Academic Center offers easy access to the Blue Star Café, a full service cafeteria with vending services and student seating available at all times. Students also have access to Student Center and dining facilities at UT Tyler.

Academic Advising

UTHSCT believes in building relationships with students and supporting them in achieving their academic goals. To that end, UTHSCT faculty and staff are committed to creating a supportive and student-friendly atmosphere. The program office provides students with the tools and information required to encourage students to set academic and career goals, empower students to reach their goals, and provide individual academic support through quality advisement and confidentiality while maintaining and honoring the dignity and potential of each student.

Student Activities

UTHSCT and its academic divisions host several events throughout the year, such as *Rock 'n' Research*, a Health Fair, Blood Drives, and much more. Information regarding these events is posted on the UTHSCT Student Webpage and Calendar. Students have free or discounted rates to multiple other events at UT Tyler, including theatre and performance groups, athletic events, dances and musical ensembles, career fairs and more.

Career Planning

The Office of Career Services at the UT Tyler main campus provides guidance, support and resources to UTHSCT students and alumni in making career decisions, developing job search strategies, and pursuing experiential opportunities and employment.

Career Services promotes faculty involvement in the career development process through collaborative relationships and classroom presentations. This is accomplished by:

- Providing assistance in various initiatives such as self-awareness, career exploration, job search, resume writing and interview preparation.
- Developing collaborative partnerships with business, government, education, and community services.
- Promoting an understanding of the relationship of education and work.

For more information, please contact the UTHSCT program office, or the UT Tyler Office of Career services at (903)565-5862 or careersvc@uttyler.edu. Please also visit the website at <http://www.uttyler.edu/careerservices>.

Counseling

Students may consult program staff at their discretion about personal concerns. The Student Counseling Center, located on the main UT Tyler campus, also helps students resolve their personal concerns and acquire the skills, attitudes, abilities, and insight that will enable them to meet the challenges of student life. The Student Counseling Center offers individual therapeutic counseling in a private, confidential setting to assist students in achieving personal and educational goals. The Student Counseling Center is staffed by Licensed Professional Counselors with in-depth training and experience, and a varied background in counseling, testing, and teaching. Some common issues that students may deal with in counseling are: test anxiety, decision-making, procrastination, communication difficulties, self-esteem, interpersonal conflicts, stress management, personal relationships, physical abuse, emotional abuse, sexual abuse, sexual assault, anxiety, depression, and many others. Students are encouraged to schedule an appointment by calling (903) 566-7254.

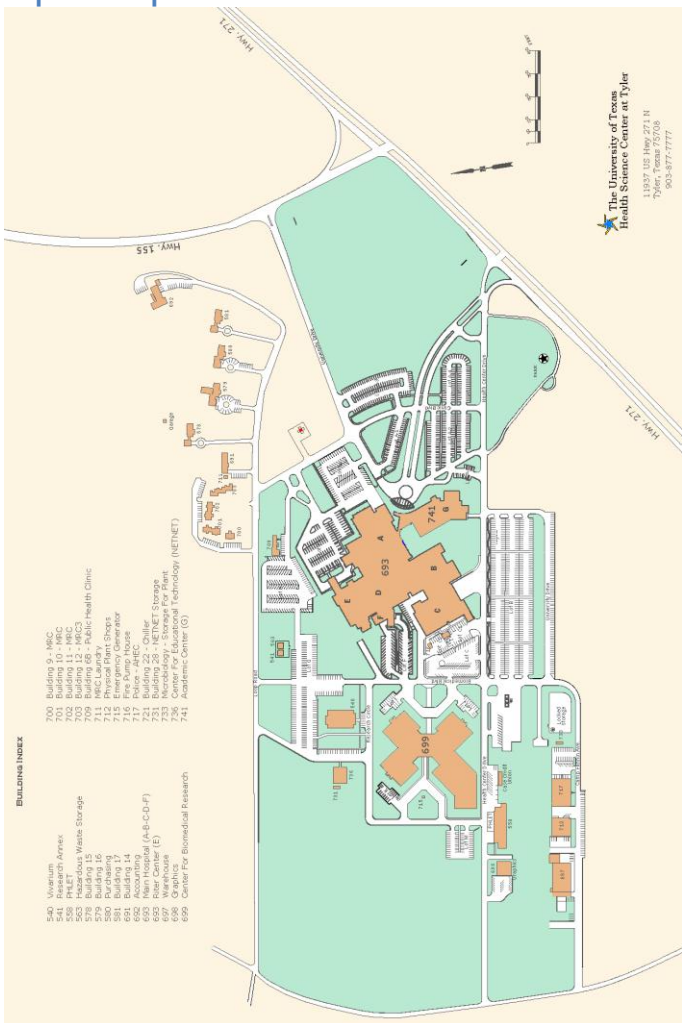
Student Accessibility Services

UTHSCT has partnered with UT Tyler's Student Accessibility and Resources (SAR) to provide equal access to all educational, social and recreational programs through coordination of services and reasonable accommodations, consultation and advocacy. SAR strives to provide services that will encourage students to become as independent and self-reliant as possible. Students requesting accessibility services should contact the Student Services Office at (903) 566-7079 at least thirty days prior to the beginning of each semester. The student seeking services is responsible for providing appropriate verification material to support requested accommodations. The student should provide diagnostic, prognostic, and prescriptive information from an approved professional in order to receive services. Appropriate accommodations may include program modifications, adjustments to testing situations and/or auxiliary aids and services. Accessibility services are provided in a private, confidential setting.

Academic Calendar

UTHSCT Academic Calendar 2012-2013		
Fall Semester 2012	August 20	Registration & orientation week begins
	August 27	Fall semester begins First day of classes
	September 3	Holiday - Labor Day
	September 12	12 th class day
	September 24	20 th class day
	October 17	Mid-semester
	October 24	Last day to drop courses Last day to withdraw from the University without WP or WF
	November 22-23	Thanksgiving holiday
	November 26	Classes resume Last day to withdraw from University
	December 7	Last day of classes
	December 10-14	Final examinations
	December 14	Fall semester ends
	December 18	Fall semester grades due
Spring Semester 2013	January 16	Spring semester begins First day of classes
	January 21	Martin Luther King Holiday
	February 1	12 th class day
	February 13	20 th class day
	March 6	Mid-semester
	March 9-17	Spring break
	March 18	Classes resume Last day to apply for degrees to be completed in May 2013
	March 20	Last day to drop courses Last day to withdraw from the University without a WP or WF
	March 28-31	Easter Holiday
	April 1	Classes resume
	April 23	Last day to withdraw from University
	May 3	Last day of classes
	May 6-10	Final examinations
	May 10	Spring semester ends
	May 14	Spring semester grades due
Summer Semester 2013	June 3	Summer semester begins First day of classes
	June 28	Mid-semester
	July 4	Independence Day holiday
	July 26	Last day of classes
	July 29 – August 2	Final examinations
	August 2	Summer semester ends
	August 6	Summer semester grades due

Campus Map



University Policies

Student Conduct

A student enrolling in the university assumes an obligation to conduct himself/herself in a manner compatible with the university's function as an educational institution. All UTHSCT students are expected and required to adhere to federal, State, and local laws, to comply with the Regents' Rules and Regulations, with UT System and institutional rules and regulations, with directives issued by an administrative official of the UT System or institution in the course of his or her authorized duties, and to observe standards of conduct appropriate for an academic institution. Refer to the UTHSCT Policy 12.9 Student Conduct, and the UT System Board of Regents' Rule 50101 on Student Conduct and Discipline.

Academic Integrity

Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways, including providing instruction on the components of academic honesty and abiding by university policy on penalties for cheating and plagiarism. Academic dishonesty includes both cheating and plagiarism.

Cheating

Dishonesty of any kind involving examinations, assignments, alteration of records, wrongful possession of examinations, and unpermitted submission of duplicate papers for multiple classes or unauthorized use of keys to examinations is considered cheating.

Cheating includes but is not limited to:

- Using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class.
- Falsifying or inventing any information, including citations, on an assigned exercise.
- Helping or attempting to help another in an act of cheating or plagiarism.

Plagiarism

Plagiarism is presenting the words or ideas of another person as if they were your own. Materials, even ideas, borrowed from others necessitate full and complete acknowledgment of the original authors. Offering the work of another as one's own is plagiarism and is unacceptable in the academic community. A lack of adequate recognition constitutes plagiarism, whether it utilizes a few sentences, whole paragraphs, articles, books, audio-visual materials, or even the writing of a fellow student. In addition, the presentation of material gathered, assembled or formatted by others as one's own is also plagiarism. Because the university takes such misconduct very seriously, the student is urged to carefully read university policies on Misconduct in Research and Other Scholarly Activity 05.00. Examples of plagiarism are:

- Submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another.
- Submitting a work that has been purchased or otherwise obtained from an Internet source or another source.
- Incorporating the words or ideas of an author into one's paper without giving the author due credit.

Disciplinary Procedure

A faculty member who has evidence and/or suspects that academic dishonesty has occurred shall gather all pertinent information, approach the student or students involved, and initiate the procedure outlined in the university policy on Misconduct in Research and Other Scholarly Activity 05.00.

After a determination of dishonesty, the faculty member shall notify the office of the dean of the student's major by submitting a Report of Academic Dishonesty form, along with supporting documentation as noted on the form. This report shall be made part of the student's record and shall remain on file with the Department Chair and the Dean's office for at least four years. The Dean shall refer second or subsequent offenses to the Research Integrity Officer established under policy 05.00. The faculty member also shall inform the student of the appeals process available to all UTHSCT students.

Students who are found to have cheated/plagiarized and have withdrawn prior to the award of a grade will continue to have the determination of the infraction within their student records. This finding will be considered by the Research Integrity Officer.

When a student is found guilty of two or more infractions, the case will be referred directly to the Research Integrity Officer. In addition, faculty members may request that the dean refer particularly serious initial cases (buying or selling papers, stealing an exam, significantly plagiarizing at the graduate level, etc.) directly to the Research Integrity Officer.

Student Complaints and Appeals

A student who wishes to file an academic-related complaint or appeal decisions related to academic integrity must follow the procedures outlined in UTHSCT Policy 12.8 Student Complaints:

1. A student must first appeal to the instructor within 30 calendar days after the first class day of the next semester. The student's grade may be withheld by the instructor pending resolution through the above procedures.
2. If the student wishes further appeal, he/she may appeal in writing to the instructor's academic unit chair/director.
3. If the dispute remains unresolved after appeal to the chair/director, the student may appeal in writing to the instructor's dean.
4. If the dispute remains unresolved after appeal to the dean, the dean will submit all related documentation to the Complaint Resolution Committee. The committee will submit a ruling within 10 days to the Executive Vice President and Chief of Staff.
5. Although the ruling of the Executive Vice President and Chief of Staff is final, students may file a complaint with the Texas Higher Education Coordinating Board at (512) 427-6205 or by email through their website at <https://www1.thecb.state.tx.us/www/comments>.

University Property

For most graduate students, their department and college will be an elemental focus of their life for several semesters, even years, as they complete their professional training. In a sense, the campus becomes a home away from home and understandably familiarity may breed carelessness regarding the use of state property, such as telephones, photocopiers, facsimile machines, mail services and university records or files. It is illegal to remove equipment from the campus for use at home or in the field without proper approval. Wrongful use of such materials can incur legal liabilities.

Sexual Harassment

Graduate students, male and female, need to know and be sensitive to issues of sexual misconduct. Complaints about sexual harassment can be brought to the student's immediate supervisor, the Department Chair, the Dean, or the Chief Human Resource Officer, as appropriate. Refer to the university's policy on Sexual Harassment and Sexual Misconduct 06.08.28 as well as the UT System Board of Regents' Rule 30105 on Sexual Harassment and Misconduct.

Acceptable Use of Computers

UTHSCT encourages the responsible use of its information resources. The use of information resources is for the university's academic activities, research and public service. Access to the university's information resources is, however, a privilege. All users of information resources should act responsibly to maintain the integrity of these resources. Furthermore, all users must abide by all existing university codes of conduct as well as by local, state and federal statutes. The university reserves the rights to limit, restrict or extend privileges and access to its resources. The university's information resources include, but are not limited to, computers, servers, networks, computer-attached devices, network-attached devices, voice systems, cable systems and computer applications.

Appropriate use should always be legal and ethical, reflect academic honesty, uphold community standards and show restraint in the consumption of shared resources. Refer to Information Resources Acceptable Use Policy 02.04.

Appropriate use demonstrates respect for intellectual property, ownership of data, system security mechanisms, and every individual's right to privacy and to freedom from intimidation, harassment and unwarranted annoyance.

Illegal Drug Use

Students are required to comply with the UTHSCT policy on Drugs and Alcohol 06.08.07. Unauthorized purchase, manufacture, distribution, possession, sale, storage, or use of any illegal drug or controlled substance on campus is strictly prohibited.

It is the policy of the state of Texas and of UTHSCT that this institution will be as free of illegal drugs as it can possibly be. Therefore, in accordance with state law and university policy, any student who is determined, through the regular disciplinary procedures of the university, to have violated this policy will be suspended from UTHSCT no more than two years and no less than the remainder of the current semester. At the discretion of the Vice President of Clinical and Academic Affairs, a student suspended under this policy may, under certain conditions, remain enrolled at the university on disciplinary probation for the remainder of the current or subsequent semester, pending in position of a suspension at a later date.

Student Right-to-Know Act

In compliance with the Student Right-to-Know and the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, UTHSCT collects specified information on campus crime statistics, campus security policies, and institutional completion or graduation rates.

Pursuant to the federal law, alleged victims of violent crime are entitled to know the results of campus student disciplinary proceedings concerning the alleged perpetrators.

The UTHSCT Police Department (refer to Campus Safety elsewhere in this bulletin) makes timely reports to the campus community on crimes considered to be a threat to students and employees and those reported to the campus police or local police agencies. These alerts are distributed by a variety of means including campus bulletin boards, e-mail, and website.

UTHSCT publishes and distributes an annual report of campus security policies and crime statistics to all current students and employees and provides copies of the report to applicants for enrollment or employment upon request. The annual campus crime statistics report references crimes that occur on property owned or controlled by UTHSCT. The report is made available online and hardcopies can be obtained from the UTHSCT Police Department upon request.



School of Medical Biological Sciences

Dean

Steven Idell, MD, PhD
Biomedical Research, Lab C5-C7
903-877-7674
Steven.Idell@uthct.edu

Department of Cellular and Molecular Biology

Departmental Chair

Anna Kurdowska, PhD (Interim)
Biomedical Research, Lab B1
903-877-7738
Anna.Kurdowska@uthct.edu

Departmental Objectives

To achieve excellence in science and education through creative use of both traditional and non-traditional instructional methods, use of state-of-the-art technology, and innovative research.

The School of Biological Sciences will provide high-quality instruction to students at the graduate level using a hands-on learning approach with emphasis on critical thinking and innovation. The school is also committed to improving scientific knowledge in a broad spectrum of biomedical sciences through our research and scholarly activities, and to disseminate that knowledge to our students, colleagues and the community at large.

Departmental Faculty List and Research Interests



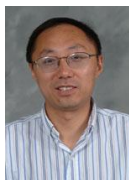
Steven Idell
MD, PhD
*Professor, Dean and
Vice President of
Research & Graduate
Studies*

Coagulation; Fibrinolysis; Regulation of
Gene Expression; Acute and Chronic
Lung Injury; Pleural Injury; Lung and
Pleural Neoplasia.



Vijay Boggaram
Ph.D.
Professor

Regulation of gene expression in the lung; mechanisms of acute and chronic lung injury.



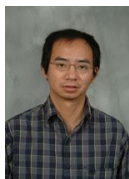
Zhenhua Dai
MD, PhD
Professor

Adaptive immunity; T-cells; transplantation rejection; immune system.



Galina Florova
PhD
Assistant Professor

Lung Injury



Jian Fu
PhD
Assistant Professor

Vascular Biology; Lung Inflammation, Injury and Repair; Critical Care Medicine.



Hong-Long Ji
MD
Associate Professor

Regulation of lung epithelial sodium channel by cGMP.



Andrey Komissarov
PhD
Associate Professor

Molecular mechanisms of fibrinolysis; blood coagulation; serpin/proteinase interaction; novel anti-thrombotic drugs.



Anna Kurdowska
PhD
Professor

Innate immunity and inflammatory response; Acute phase proteins; cytokines and chemokines.



Murty Madiraju
PhD
Professor

Replication initiation and Cell cycle control in *Mycobacterium tuberculosis*.



Pierre
Neuenschwander
PhD
Associate Professor

Blood coagulation; thrombosis; enzyme kinetics; protein structure/function.



Michael Pangburn
PhD
Professor

Complement system.



Usha Pendurthi
PhD
Professor

Blood coagulation; fibrinolysis;
regulation of gene expression.



Malini Rajagopalan
PhD
Professor

Cell cycle of *Mycobacterium*
tuberculosis.



Vijay Rao
PhD
Professor

Hemostasis and thrombosis, membrane
trafficking, cell signaling



Sreerama Shetty
PhD
Professor

Post-transcriptional regulatory
mechanisms of urokinase; mechanisms
of urokinase-mediated cellular
transformation and invasion.



Hua Tang
PhD
Associate Professor

Angiogenesis and endothelial
inflammatory activation, including
endothelial cytokine production and
cell adhesion molecule expression.



Torry Tucker
PhD
Assistant Professor

Lung injury.



Amy Twinnereim
PhD
*Research Assistant
Professor*

Immunology; T-cells; BSL3 lab; FACS
core; CT core.

CMB Adjunct Faculty

(Stephen F. Austin State University, Nacogdoches, TX)

- Robert Stewart, PhD (SFASU, Biology)
- Beatrice Clack, PhD (SFASU, Biology)
- Alexandra Van Kley, PhD (SFASU, Biology)

UTHSCT Master's Degree in Biotechnology

Program Director

Michael Pangburn, Ph.D.

Biomedical Research, Lab A4

903-877-7663

Michael.Pangburn@uthct.edu

Program Objectives

Graduates of the UTHSCT Biotechnology program will:

- Have mastered the techniques of modern biotechnology.
- Have an in-depth knowledge of biological and biochemical systems to enable graduates to adapt to emerging technologies in the field of

biotechnology.

- Be a valuable asset to industry and other organizations requiring biotechnology expertise.
- Attain a level of professional integrity and competency integral to biotechnology research, commerce, and ethics.
- Be prepared for careers in the biotechnology industry or for continuation of their education in a Ph.D. or M.D. program.
- Have developed critical thinking and problem-solving skills.
- Have honed their ability to communicate effectively, both orally and in writing.
- Be computer literate.

Admission Prerequisites

To be admitted to the Master's Degree Program in Biotechnology at UTHSCT, a student must hold a Bachelor's Degree in Biology or Chemistry (or a related field) and have completed the following courses:

- Microbiology - must have a B or better in the course
- Biochemistry I - must have a B or better in the course

Admission Requirements

- Students must complete the graduate program application for admission into the Biotechnology graduate program (available on the website).
- Applicants must submit official transcripts from all universities and colleges attended, including community colleges to the program office.
- Applicants should have an overall grade point average (GPA) of 3.0 on a 4.0 scale, and a 3.0 in their field of study.

(If you do not meet the minimum GPA requirements, it is possible to be admitted on a probationary status. You should contact the program advisor to see if your GRE scores and/or combination of other factors might meet the requirements for admission.)

- Applicants must have a minimum score of 900 on the GRE.
(You can sign up for the GRE online (<http://www.ets.org/gre/>) as well as find out about testing centers and dates. If you have already taken the GRE, this site will allow you to request an official copy of your scores.)

- All Applicants must submit 3 letters of recommendation. These letters should be written by former professors as a means to highlight why you would do well in the Biotechnology graduate program.

Biotechnology Course Offerings

Fall Semesters:

- Fundamentals of Biomedical Research; BIOT 5310 (BTC 513)
- Critical Reading II; BIOT 5132 (BTC 554)
- Molecular Biochemistry; BIOT 5312 (BTC 563)
- Advanced Biotechniques; BIOT 5411/5411L (BTC 559/559L)
- Student Seminar; BIOT 5101 (BTC 556)
- Advanced Techniques in Molecular Biology; BIOT 6311 (BTC 561)

Spring Semesters:

- Critical Reading I; BIOT 5131 (BTC 553)
- Advanced Immunology; BIOT 6334 (BTC 575)
- Advanced Metabolism; BIOT 5422 (BTC 563)
- Proteins and Nucleic Acids; BIOT 5421 (BTC 555)
- Student Seminar; BIOT 5101 (BTC 556)
- Advanced Techniques in Protein Chemistry; BIOT 6321 (BTC 562)

Summer Semesters:

- Biophysical Chemistry; BIOT 6436/6436L (BTC 558/558L)
- Introduction to Biotechnology; BIOT 5300 (BTC 503)
- Biochemical Calculations; BIOT 5102 (BTC 572)

Courses offered every semester:

- Thesis Research; BIOT 6331 (BTC 589)
- Thesis Writing; BIOT 6332 (BTC 590)
- Advanced Graduate Studies; BIOT 5331/5332 (BTC 575/576)



Two-Year Master's Degree Program – Biotechnology

*Core Course; ‡Required Course (Prescribed Elective); †Free Elective

Program Year 1				Program Year 2			
Fall Term		Spring Term		Fall Term		Spring Term	
Course ID	Course Name	CH	Course ID	Course Name	CH	Course ID	Course Name
BTC 513‡	Fundamentals of Biomedical Research	3	BTC 555*	Proteins & Nucleic Acids	2	BTC 558‡	Biophysical Chemistry
BTC 559*	Advanced Biotechniques	2	BTC 555L*	Proteins & Nucleic Acids LAB	2	BTC 558L†	Biophysical Chemistry LAB
BTC 559L*	Advanced Biotechniques LAB	2	BTC 557*	Advanced Metabolism	2		
BTC 563*	Molecular Biochemistry	3	BTC 557L*	Advanced Metabolism LAB	2		
			<u>Spring-offered Electives</u>				
			BTC 553‡	Critical Reading I	1	BTC 575†	Advanced Graduate Studies
Semester Credit Hours: 10			Semester Credit Hours: 9			Semester Credit Hours: 4-7	
Fall Term		Spring Term		Fall Term		Spring Term	
Course ID	Course Name	CH	Course ID	Course Name	CH	Course ID	Course Name
BTC 561*	Advanced Techniques in Molecular Biology with Lab	3	BTC 562*	Advanced Techniques in Protein Chemistry with Lab	3		
BTC 589‡	Thesis Research	3	BTC 590‡	Thesis Writing	3		
	<u>Fall-offered Electives</u>		BTC 527†	Advanced Immunology (even years)	3		
BTC 554‡	Critical Reading II	1	BTC 528†	Tissue Culture (odd years)	3		
BTC 576†	Advanced Graduate Studies	1-3					
Semester Credit Hours: 7-9			Semester Credit Hours: 6-9			Minimum of 36 Total Credit Hours Required to Graduate	

Courses in Biotechnology

BTC numbers refer to the old 3-digit system.

BIOT numbers refer to the 4-digit TCCN System.

Symbols: *Core course; ‡Required course, ^EElective; [§]A student must register for BTC 589 (BIOT 6331) and/or BTC 590 (BIOT 6332) each semester or summer session until the thesis is completed. However, a student may not register the first time for BTC 590 (BIOT 6332) until the thesis proposal has been approved. Moreover, a maximum of three semester hours each of BTC 589 (BIOT 6331) and BTC 590 (BIOT 6332) will be counted toward the M.S. in Biotechnology.

- BTC 503.** ^E**Introduction to Biotechnology.** Three semester hours. The focus is on learning practical techniques used in fundamental biotechnology. These techniques will be presented within the scheme of prokaryotic gene manipulation and expression of protein product. The techniques will include gene manipulation, gene cloning, DNA purification and analysis, gene expression, protein quantification & analysis, and PCR.
- BIOT 5301.**
- BTC 513.** [‡]**Fundamentals of Biomedical Research.** Three semester hours. Designed for students desiring research projects directed by UTHCT faculty, to provide an orientation into the research laboratory workplace, to master fundamental laboratory techniques, to develop skills in planning a laboratory project and to present their work in both an oral and written context.
- BIOT 5310.**
- BTC 527.** ^E**Advanced Immunology.** Three semester hours. Advanced survey of the immune system with focus on the human and mouse models. Covers the origin and differentiation of the hematopoietic system, antibody structure and function, T cell subsets and the function of each subset, and the role of innate and adaptive immunity in the response to infection. Alternates years with tissue culture techniques and proper care, management, handling, propagation and freezing of various cell lines. *Alternates annually with BTC 528 (BIOT 6335).*
- BIOT 6334.**

- BTC 528.** **‡Tissue Culture.** Three semester hours. Hands-on learning of techniques and proper care, management, handling, propagation and freezing of various cell lines. *Alternates annually with BTC 527 (BIOT 6334).*
- BIOT 6335.**
- BTC 553.** **‡Critical Reading I.** One semester hour. This course exposes students to current research published in major scientific journals. Students will learn how to read and interpret methodologies and results published by other scientists. This course will provide the student with a thorough understanding of the strengths and limitations of scientific writing. This course is the first of a two-course sequence and introduces the student to basic organization of scientific papers and how to identify the questions being addressed based on the scientific method.
- BIOT 5131.**
- BTC 554.** **‡Critical Reading II.** One semester hour. This course exposes students to current research published in major scientific journals. Students will learn how to read and interpret methodologies and results published by other scientists. This course will provide the student with a thorough understanding of the strengths and limitations of scientific writing. This course is taught at a higher level than Critical Reading I and focuses on critiquing and developing opinions on scientific articles. Although this is the second of a two-course sequence, the first course (Critical Reading I) is not a prerequisite. This course is team taught with a different instructor facilitating the discussion each week on a topical paper of choice.
- BIOT 5132.**
- BTC 555.** ***Proteins and Nucleic Acids.** Two semester hours. The goal of the course is to provide a critical understanding of the relationship between structure and function of biological macromolecules such as proteins and nucleic acids. The laboratory provides hands-on experience with state-of-the-art equipment used in the biotech industry. Methods presented will include PCR, Plasmid purification, Gel electrophoresis (Agarose, SDS,2D), Restriction Digestion, Sequencing,
- BIOT 5321.**

Denaturing Gradient Gel Electrophoresis, Bradford, ELISA, Chromatography and etc. *Co-requisite BTC 555L (BIOT 5321L).*

**BTC 555L.
BIOT 5321L.** ***Proteins and Nucleic Acids Laboratory.** Two semester hours. The laboratory experiments will allow students to gain experience in using computer applications related to the determination of the structures and properties of biological molecules and recent bioinformatics tools. *Co-requisite BTC 555 (BIOT 5321).*

**BTC 556.
BIOT 5101.** **‡Biotech Research Seminar.** One semester hour. Students will present their thesis research progress to faculty and peers. Each student enrolled in BTC 575 (BIOT 5331), BTC 576 (BIOT 5332), BTC589 (BIOT 6331) or BTC 590 (BIOT 6332) must present his/her research each semester enrolled as scheduling permits. The student should have a committee meeting following the seminar. Seminars are formal PowerPoint presentations in preparation for thesis defense.

**BTC 557
BIOT 5322.** ***Advanced Metabolism.** Two semester hours. The primary objective of this course is for the student to gain an understanding of the metabolic processes in bacteria, plants and animal cells and how metabolism is affected by enzymes, substrates, other metabolites and by bio-production of commercial products. *Co-requisite BTC 557L (BIOT 5322L).*

**BTC 557L.
BIOT 5322L.** ***Advanced Metabolism Laboratory.** Two semester hours. The laboratory experiments will allow students to gain experience in metabolic assays and enzyme kinetic assays. Students will also carry out an independent project. *Co-requisite BTC 557 (BIOT 5322).*

**BTC 558.
BTC 6336.** **‡Biophysical Chemistry.** Two semester hours. Instrumental analysis of proteins, nucleic acids, carbohydrates and lipids. Methods may include ultracentrifugation; gradient separation of proteins and nucleic acids; UV/Visible spectroscopy; mass spectrometry; X-ray diffraction of proteins and nucleic acids; HPLC of proteins. Course may span two summer sessions. *Co-requisite BTC 558L (BIOT 6335L).*

- BTC 558L.** **‡Biophysical Chemistry Laboratory.** Two semester hours. The laboratory provides hands-on experience with state-of-the-art equipment used in the biotech industry to separate, purify and characterize proteins and nucleic acids. *Co-requisite BTC 558 (BIOT 6335).*
- BIOT 6336L.**
- BTC 559.** ***Advanced Biotechniques.** Two semester hours. An introduction to standard molecular biology techniques such as isolation and purification of proteins and nucleic acids, cloning and expression of recombinant proteins with laboratory component. *Co-requisite BTC 559L (BIOT 5311L).*
- BIOT 5311.**
- BTC 559L.** ***Advanced Biotechniques Laboratory.** Two semester hour. Hands-on training in fundamental laboratory procedures and instrumentation used in recombinant DNA and protein technology. Practical lab-bench experience, record keeping and data presentation is emphasized. *Co-requisite BTC 559 (BIOT 5311).*
- BIOT 5311L.**
- BTC 561.** ***Advanced Techniques in Molecular Biology.** Three semester hours (one hour credit for lecture, two hours credit for included labs). A comprehensive study of molecular biology applications and techniques as they relate to biotechnology. The topics covered in this course include mRNA isolation and Northern blotting, gene cloning, mutation of DNA, real-time quantitative PCR, bioinformatics, expression of recombinant proteins, large-scale production of proteins through fermentation and generation of transgenic animals.
- BIOT 6311.**
- BTC 562.** ***Advanced Techniques in Protein Chemistry.** Three semester hours (one hour credit for lecture, two hours credit for included labs). A comprehensive study of protein chemistry applications and techniques as they relate to biotechnology. The topics covered in this course include protein purification, protein characterization, binding studies and proteomics.
- BIOT 6321.**

- BTC 563.** ***Molecular Biochemistry.** Three semester hours. Application of molecular genetics, transcription control mechanisms, gene expression, molecular cloning, and applications to biotechnology.
- BIOT 5312.**
-
- BTC 575.** **^EAdvanced Graduate Studies.** One to three semester hours. Research hours spent under the supervision of a research advisor. The student begins an in-depth study of a particular scientific focus with a literature review of the area, a justification study of a project and mastery of fundamental laboratory techniques necessary for the research study. Students work with their research advisor to plan a thesis project and write a thesis proposal. Each hour of course credit translates into a minimum of three hours of lab work per week.
- BIOT 5331.**
-
- BTC 576.** **^EContinuation of BTC 575 (BIOT 5331).** One to three semester hours. Continuation of research hours spent under the supervision of a research advisor.
- BIOT 5332.**
-
- BTC 589.** **§†Thesis Research.** Three semester hours. May be repeated. Must be taken in three hour blocks. Research hours spent under the supervision of a research advisor. Students focus on their thesis research project. Each hour of course credit translates into three hours of lab work per week.
- BIOT 6331.**
-
- BTC 590.** **§†Thesis Writing.** Three semester hours. May be repeated in three-hour blocks. A grade is not assigned until student graduates. Only last three hours count toward degree. Research hours spent completing the thesis research project and writing the thesis manuscript. The culmination of the course will be the thesis presentation and final defense. The thesis is designed to lead to a Master's Degree in Biotechnology. *Prerequisite: approved thesis proposal.*
- BIOT 6332.**

Department of Microbiology

Departmental Chair

Richard Wallace, MD
Biomedical Research, Lab D507
903-877-7680

Richard.Wallace@uthct.edu

Departmental Objectives

The Department of Microbiology supports the mission of UTHSCT by providing excellence in research, education and patient care. Projects include grants, contracts and agreements - both from public and private sectors - which support research, education and patient care.

Departmental Faculty List and Research Interests



Richard Wallace
MD
Professor and Chair

Mycobacteria; Nocardia.



Susan Howard
PhD
Associate Professor

Investigating the regulation of gene expression in mycobacteria.



Barbara Elliott
MS
Research Associate Professor

Mycobacteria, Nocardia, other aerobic actinomycetes

Department of Immunology (CPIDC)

Departmental Chair

Peter Barnes, MD
Biomedical Research, D602
903-877-5956
Peter.Barnes@uthct.edu

Departmental Objectives

To provide high-quality immunology instruction to students in UTHSCT graduate programs and carry out Nationally-competitive research in immunology and infectious diseases as it relates to faculty interests and the overall institutional mission.

Departmental Faculty List and Research Interests



Peter Barnes
MD
Professor and Chair

Tuberculosis; Influenza.



Buka Samten
MD
Associate Professor

Tuberculosis; Immunology; T-cells



Homayoun (Amir)
Shams
DVM, PhD
Associate Professor

Immunobiology and molecular pathogenesis of infectious diseases; innate and adaptive immunity in tuberculosis and influenza.



Krishna
Vankayalapati
PhD
Associate Professor

Tuberculosis; NK cells; immunity.



THE U
Health

Cancer Treatment
and
Prevention Center

