

# **University of Tennessee at Chattanooga College of Arts and Science**

**Program Handbook** 

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#### CHECKPOINTS FOR UNDERGRADUATE STUDENTS

Checkpoints	Student Responsibilities		
CHECKPOINT ONE	1. Submit proof of fingerprinting		
(First Two Weeks of Step One)	(with acceptable outcome).		
	1. ACT composite test score of 22		
	or above on the Enhanced ACT		
	or a combined verbal and		
	mathematics score of 1020 or		
	above on the Recentered SAT.		
	2. If you do not meet requirement		
	#1 (above), you must pass the		
	Praxis I Pre-Professional Skills		
CHECKBOINE 2	Test (PPST).		
CHECKPOINT 2	3. 2.5 GPA (UTC and cumulative).		
	4. Take and receive a passing score		
	on the UTeaChattanooga		
	writing assessment essay.		
	5. Successful completion of Steps		
	One and Two with a grade of at		
	least C.		
	6. UTeaChattanooga formal		
	application completed and		
	submitted.		
	7. UTeaChattanooga application		
	for interview submitted.		
	8. Successful UTeaChattanooga		
	Interview.		
	1. Minimum 2.5 GPA (UTC,		
	cumulative, UTSM and content).		
	2. Successfully complete all		
	remaining UTeaChattanooga		
	course work with grades of C or		
CHECKPOINT 3	better (Knowing & Learning,		
CHECKPOINT 5	Classroom Interactions,		
	Perspectives, Research Methods,		

	Project-Based Instruction, Mathematical Models, Functions and Applications (math only) with exception of Apprentice Teaching. Exceptions require appeal process. 3. Passing score on preliminary portfolio. 4. Praxis II exams must be successfully completed and scores reported prior to Apprentice Teaching.
	<ol><li>Apprentice Teaching application completed, submitted and accepted.</li></ol>
	6. Complete application for and undergo Hamilton County
	substitute teacher training. 7. Five copies of resume submitted.
CHECKPOINT 4	<ol> <li>Successful completion of apprentice teaching.</li> <li>Required documentation (all assignments must have satisfactory scores):         <ul> <li>Portfolio completion</li> <li>Reflection evaluations</li> <li>School culture assignment evaluation</li> <li>Secondary student learning evaluations (pre and post)</li> <li>Summary of hours</li> <li>Focused observation forms</li> <li>Completed final evaluation with scores above 2 in all criteria</li> <li>Updated resume submitted</li> <li>Submission of time capsule with future address</li> </ul> </li> </ol>
Post Graduation (UTeaChattanooga Induction Support Years)	<ol> <li>Complete demographic survey annually.</li> <li>Submit induction years'</li> </ol>

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Note: A student must complete all requirements in one checkpoint before moving to the next.

# **CHECKPOINT 1**

Successfully complete and submit documentation of fingerprinting.



#### FINGERPRINTING PROCEDURES FOR STUDENTS

UTeaChattanooga recognizes its ethical obligation to the children, youth, and adults in our cooperating fieldwork locations, therefore we require compliance with the State of Tennessee's ruling that all students working with PreK-12 students undergo a fingerprint-based background check. Results from this background check must be received by the UTeaChattanooga Program before students are allowed to proceed with any field experiences in the PreK-12 setting. Please follow the steps as outlined below:

- 1. Prior to being fingerprinted sign a University of Tennessee Release Form.
- 2. Register online with COGENT SYSTEMS. Do this by going to the following website: <a href="www.tennessee.cogentid.com">www.tennessee.cogentid.com</a> and clicking on "Register Online." Fill out the yellow sections. When entering the ORI number (TNCC33079), hit tab (not enter) to access the drop down box for transaction type (DP). If you register online, make sure to print out your confirmation letter to take to the fingerprinting site. If you choose to register by phone (1-877-862-2425), you will be given a confirmation number that you will need to take to the fingerprinting site.
- 3. Provide your personal identification information (see below).
- 4. Payment is determined at registration. You may pay by credit card or debit card, or you may take a money order made out to Cogent Systems to the fingerprinting site.
- 5. Allow at least 24-36 hours after calling COGENT before you go to UPS to be printed. Otherwise, you may be told your profile is not in their system and you will have to make a second trip to be printed. Appointments are not available, so please be sure your schedule is flexible as you may have to wait in line. TAKE A VALID PHOTO ID WITH YOU WHEN YOU GO TO BE PRINTED.
- 6. After being fingerprinted, write down your transaction number and bring THIS NUMBER AND YOUR RECEIPT to Jennifer Faires in the UTeaChattanooga office in the Collins Street Annex Office Building. Your tracking number should be 16 digits and look similar to this sample number: TNE0000000000000. DO NOT FORGET YOUR TRANSACTION NUMBER!! IT IS YOUR ONLY PROOF OF FINGERPRINTING.

Please be prepared to provide a state issued ID. If you do not have a state issued ID, be prepared to provide the following personal identification information at the UPS fingerprinting location:

- 1. Legal name, birthdate, birthplace, gender, race, eye/hair color, height/weight
- 2. Social security number
- 3. Country of citizenship
- 4. Phone and address
- 5. Transaction type: DP
- 6. Agency ORI:
- 7. Payment to be made by: Applicant
- 8. Printing location: UPS Store #1995,

2288 Gunbarrel Road Chattanooga TN 37421

9. Employer name and address: University of Tennessee at Chattanooga

615 McCallie Ave. Chattanooga, TN 37403 Attn: Dr. Sandy Watson UTeaChattanooga,

Dept. 7156

NOTE: If you need to check on your status after being fingerprinted, allow at least 36 hours and then contact Jennifer Faires at the UTeaChattanooga Office Building in the Collins Street Annex. You will need to provide her with your name, SSN, DOB, phone number and tracking number

### **COGENT FINGERPRINTING LOCATION:**

**UPS STORE** 

2288 Gunbarrel Road

Chattanooga, TN 37421

Hours of Operation: 8:30am-7:00 pm Monday-Friday; 10:00 am – 4:00 pm Saturday

# **CHECKPOINT 2**

- Acceptable test scores submitted
- Successful score on essay
- GPA requirements met
- Successful completion of Steps One and Two
- UTeaChattanooga Application submitted
- Interview Application submitted
- Interview successfully completed
- CAPP sheet submitted

#### • Test scores (Praxis I, ACT, or SAT):

The applicant for admission to UTeaChattanooga must submit documents indicating achievement of **ONE** of the following scores:

	Composite	21	(prior	to	Enha	nced 2	2 (1989 a	and lat	er)
ACT	1989)								
	Composite	920	(prio	r to	Recei	ntered	(April	1995	and
SAT	1989)				later)				
Praxis				Read	ing				
I	Math 173			174	Ü	Writii	ng 173		

• <u>Essay:</u> An in-class essay will be given at the end of Step Two. You must demonstrate writing proficiency to be allowed to continue in the program. Please see your Step Two teacher for further information.

#### • 2.5 GPA - UTC and Cumulative:

2.5	Cumulative GPA
2.5	GPA on all courses taken at UTC

# • UTSM 1010 and UTSM 1020 (grade of "C" or higher):

# UTSM 1010: Step One: Inquiry Approaches to Teaching Mathematics and Science (1)

Introduction to mathematics, and science teaching as a career. Discussions include standards-based lesson design and various teaching and behavior management strategies. Fieldwork consists of planning and teaching three inquiry-based lessons to students in grades three to five in local elementary schools. One and one half lecture hours per week. Every semester. Field component. *May not be used for graduate credit*.

# UTSM 1020 : Step Two: Inquiry Based Lesson Design in Math and Science (1)

Topics may include routes to teacher certification in mathematics and science; various teaching methods that are designed to meet instructional goals; and learner outcomes. Students develop and teach three inquiry-based lessons in their field in a middle school and participate in peer coaching. One and one half lecture hours per week. Every semester. Field component. *Prerequisite: UTSM 1010 with a grade of at least C or consent of a UTeaChattanooga adviser in the College of Arts and Sciences. May not be used for graduate credit.* 

## • <u>UTeaChattanooga Program Application:</u>

Applications are located on the UTeaChattanooga website or in the UTeaChattanooga office bldg. in the Collins Street Annex (room 114). Students must complete and submit an application along with a current CAPP sheet to the UTeaChattanooga office in the Collins Street Annex office building prior to taking any UTeaChattanooga courses beyond Steps One and Two.



# UNIVERSITY OF TENNESSEE AT CHATTANOOGA COLLEGE OF ARTS AND SCIENCES

# APPLICATION FOR ADMISSION To UTeaChattanooga

NAME	SS#
Last First	Middle/Maiden
LOCAL ADDRESS:	PERMANENT ADDRESS:
PHONE	PHONE
EMAIL ADDRESS	
TEACHER LICENSURE SOUGHT:	
SECONDARY:	
MATHEMATICS	
BIOLOGY	
EARTH SCIENCE	
CHEMISTRY	
PHYSICS	
 Signature of Adv	visor Date

# SUBMIT THIS APPLICATION WITH A CURRENT CAPP SHEET TO THE UTeaChattannoga ADMINISTRATIVE ASSISTANT.

Test Requirements:		
I have met the test requirements for admission to UTeaChattane have submitted documentation regarding scores on the following the UTeaChattanooga office in the Collins Street Annex: PRAXIS IACTSAT	_	
I have not yet met the test requirement for admission to UTeaC	hattano	oga.
Preliminary Statement of Background: Have you ever been:	YES	NO
<ul> <li>counseled or disciplined for being late/absent from work or school?</li> <li>convicted of a felony?</li> <li>convicted of a crime involving dishonesty?</li> <li>convicted of a crime involving violence to another person?</li> </ul>		
Give details for any "Yes" answers. You may use the space below or anot necessary.	her she	eet if
<ul> <li>I understand that:</li> <li>meeting the minimum criteria does not guarantee admission to UTeaChattanooga.</li> <li>false statements on this application may lead to disqualification for consideration for admission to the program or subsequent disquafrom the program.</li> </ul>		ion
Signature of Applicant D	ate	

#### PLEASE NOTE:

A. This application should be submitted to the UTeaChattanooga Office in the Collins Street Annex office building prior to enrollment in Knowing and Learning. Applicants who wish to be admitted must have complete files and submit an interview application. Interviews will not be scheduled unless the admission file is complete.

### • <u>UTeaChattanooga Interview Application:</u>

Before being admitted to the UTeaChattanooga Program, you must receive a favorable recommendation from an interview panel. The panel will consist of UTeaChattanooga faculty and staff. You should dress professionally and be prompt. Interviews are typically held in the UTeaChattanooga Student Commons Room, Collins Street Annex. Submit the completed UTeaChattanooga Application for Interview form (following page) to the UTeaChattanooga administrative assistant, and she will schedule your interview appointment. Interviews are held several times per semester and summers as needed.

You may be asked about your short and long term professional goals, your educational philosophy, science or mathematics educational issues, etc. Be prepared to be evaluated in areas such as appearance, verbal communication, and information processing. The interview should last approximately 20-30 minutes. A letter will be mailed to you confirming your admission to UTeaChattanooga or indicating reasons why you have not been admitted.

In some cases, additional field placements, coursework, remediation, mock interviews, and additional interviews are recommended by the interview panel.



#### APPLICATION FOR INTERVIEW

Submit this complete form to UTeaChattanooga, Collins Street Annex office building, to sign up for an interview. Call 425-2553 for final confirmation of your interview time.

NAME			
SS#	Student ID		
LOCAL ADDRESS			
CITY	STATE	ZIP	
EMAIL	PHONE		
MAJOR			

Please make an appointment with the UTeaChatttanooga administrative assistant in the Collins Street Annex office to review with her your file to be sure all requirements have been satisfied and all documents are present. The following requirements must be completed and documents present in your file prior to receiving an interview date: (Please check each appropriate item to indicate that it has either been submitted or successfully completed.)

	Check	
UTeaChattanooga Application		
Testing Scores		
Step One		
Step Two		
Fieldwork Documentation		
Resume		
Essay		
GPA 2.5 in Steps 1 & 2 (no grade lower than "C") GPA 2.5 Content Area (no grade lower than "C") GPA 2.5 UTC		
GPA 2.5 Cumulative		
I certify that UTeaChattanooga stu has successfully completed all UTe and that all documentation of sucl file.	eaChattanooga red	quirements to date
Signature, UTeaChattanooga Admir	nistrative Assistant	<del>-</del>
Date		

# • Admission to UTeaChattanooga:

Successful completion of Checkpoints 1 & 2 is required for UTeaChattanooga admission.

# INTERVIEWS WILL NOT BE SCHEDULED UNLESS THE ADMISSION FILE IS COMPLETE.

# • CAPP sheet submitted:

You must submit a current CAPP sheet to the UTeaChattanooga office (Collins Street Annex, 114) as of the time seeking admission to the UTeaChattanooga program.

# **CHECKPOINT 3**

- Minimum 2.5 GPA (UTC, cumulative, UTSM and content with no grade below a C in content or UTSM)
- Successful completion of all UTeaChattanooga coursework with exception of Apprentice Teaching. Exceptions require an appeals process.
- Passing score on Preliminary Portfolio
- Praxis II exams must be successfully completed and scores reported prior to Apprentice Teaching
- Apprentice Teaching Application
- Hamilton County substitute teacher application and training must be completed prior to Apprentice Teaching
- Five copies of your resume must be submitted to the UTeaChattanooga office (CANX, 110) prior to Apprentice Teaching

- Mimimum 2.5 GPA (UTC, cumulative, UTSM and content with no grade below a C in content or UTSM courses.
- <u>Successful completion of all remaining UTeaChattanooga</u> course work with grades of C or better with exception of <u>Apprentice Teaching:</u>

### UTSM 2010: Knowing and Learning (3)

Psychological foundations of learning; problem solving in mathematics and science education utilizing technology; principles of expertise and novice understanding of subject matter; implications of high stakes testing; and foundations of formative and summative assessment. Every semester. For UTeaChattanooga students only; not open to Education students. *Prerequisites: Admission to the UTeaChattanooga program; university, UTeaChattanooga and content grade point average of at least 2.5; UTSM 1020 with grades of at least C or consent of the UTeaChattanooga adviser in the College of Arts and Sciences.* 

#### UTSM 2020: Classroom Interactions (3)

Principles of delivering effective instruction in various formats (lecture, lab, cooperative settings); examination of gender, class, race, and culture in mathematics and science education; overview of policy related to mathematics and science education. Every semester. Field component. For UTeaChattanooga students only; not open to Education students. *Prerequisites: Admission to the UTeaChattanooga program; university, UTeaChattanooga, and content grade point averages of at least 2.5; UTSM 1020 with a grade of at least C or consent of the UTeaChattanooga adviser in the College of Arts and Sciences.* 

### MATH 2300: Mathematical Models, Functions and Applications (3)

Lab-based activities designed to strengthen and expand knowledge of topics in secondary mathematics, focusing on topics from precalculus and elementary calculus. Explorations will involves the use of multiple representations, transhformations, data analysis techniques and interconnections among geometry, probability and algebra. Most labs will include significant use of various technologies. The use of quantitative approaches and building

relationships between discrete and continuous reasoning will be recurrent themes. Every semester. *Prerequisites: Admissions to the UTeaChattanooga program; university, UTeaChattanooga, and content grade point averages of at least 2.5; UTSM 2020 and Math 1920 and 1921, with a grade of at least C or consent of the UTeaChattanooga adviser in the College of Arts and Sciences.* 

#### UTSM 3010: Perspectives on Science and Mathematics (3)

Introduction to the historical, social and philosophical implications of mathematics and science through investigations of pivotal experiments and findings. Every semester. For UTeaChattanooga students only; not open to Education students. *Prerequisites: Admission to the UTeaChattanooga program; university, UTeaChattanooga, and content grade point averages of at least 2.5; ENGL 1020 and completion of all 1000-level major courses with a grade of at least C; UTSM 2020, with a grade of at least C or consent of the UTeaChattanooga adviser in the College of Arts and Sciences.* 

#### UTSM 3020: Research Methods (3)

Recent developments and research methods in science. Every semester. For UTeaChattanooga students only; not open to Education students. *Prerequisites: Admission to the UTeaChattanooga program; university, UTeaChattanooga, and content grade point averages of at least* 2.5, ENGL 1020, a college level statistics course and completion of all 1000-level major courses with a grade of at least C; UTSM 3010 with a grade of at least C or consent of the UTeaChattannoga adviser in the College of Arts and Sciences.

### UTSM 4010: Project-Based Instruction (3)

Foundations of project-based, case-based, and problem-based learning environments; principles of project-based curriculum development in mathematics and science education; classroom management and organization of project-based learning classrooms. Every semester. Field component. For UTeaChattanooga students only; not open to Education students. *Prerequisites: Admission to UTeaChattanooga program; university, UTeachattanooga, and content grade point averages of at least 2.5; UTSM 3020 with a grade of at least C or* 

consent of the UTeaChattanooga adviser in the College of Arts and Sciences and a passing score on preliminary portfolio.

#### **UTSM 4020: Apprentice Teaching (6)**

Closely supervised fieldwork in cooperating school. Experience includes carrying out the duties of a secondary teacher. Twenty hours of fieldwork a week for one semester. Offered on a pass/fail basis only. Every semester. For UTeaChattanooga students only; not open to Education students. Field component. *Prerequisites: Checkpoint three must be successfully completed*.

#### • <u>Preliminary Portfolio:</u>

The UTeaChattanooga Portfolio provides benchmarks to demonstrate specific teaching proficiencies and exhibit mastery in subject matter knowledge. The portfolio is submitted twice during the course of the program – once in preliminary form and again in final form.

The preliminary portfolio is a pre-requisite to Project Based Instruction (UTSM 3010) that helps students build a skill set that includes:

- 1. the collection of teaching artifacts that demonstrate a student's experiences,
- 2. reflection on and analysis of those experiences,
- 3. the articulation of important concepts in secondary math and science education

A complete guide to the requirements and assessments of the preliminary and final portfolio is located on the UTeaChattanooga website. To pass the preliminary portfolio, students must earn a score of at least 1 on each proficiency, except for section 1.d, the academic summary.

#### • Praxis II Scores:

Praxis II tests measure a candidate's knowledge of the subject(s) he or she will teach. They also measure general and subject-specific pedagogical skills and knowledge.

All applicants for initial teacher licensure must document appropriate minimum scores on one of the Principles of Learning and Teaching tests as well as specified test(s) in the content area. These tests are one to two hours in length and may be taken independently of each other or in different combinations as a package. They are administered <u>only</u> in a paper-and-pencil format at various sites throughout the country.

Information about registering for the tests may be found in *The Praxis* Series: Professional Assessments for Beginning Teachers Registration Bulletin. This booklet is available in the UTeaChattanooga administrative assistant's office (114) in the Collins Street Annex, UTC's Testing Center (258 Hooper Hall), or from the Praxis Series Services at (609) 771-7395. You may also get information online at www.ets.org/praxis. Test at a Glance booklets can be obtained online for each test; these booklets include content outlines, sample questions with rationales for the best answers, and test taking strategies. While the best preparation for any test in the Praxis Series is the knowledge and experience gained from content and UTeaChattanooga coursework, the booklets provide appropriate review and focus for the tests. Study materials are also available for two-week checkout from the UTeaChattanooga office and are also available in many bookstores. Before purchase, students should analyze these materials carefully to assure their relevance to the test(s) which will be taken. Praxis review sessions are presented several times a year at UTeaChattanooga to help students prepare to take these required examinations.

Information as to the tests specified for each licensure area as well as the required minimum scores may be obtained from the UTeaChattanooga office or the UTC Testing Center. The ETS Registration Bulletin also lists the required tests by state. Students are urged to be sure that they register for the correct test(s).

Students seeking licensure in states other than Tennessee may be required to take additional Praxis II tests. However, the test score(s) which meet Tennessee requirements will also meet Georgia requirements; this may be true of some additional states. Students should obtain information from the licensing agencies in other states before registering for tests other than those required by Tennessee.

Praxis II requirements for licensure are determined by the Tennessee Department of Education. UTeaChattanooga has mandated that a candidate must meet all Praxis II requirements for the licensure area sought before participating in Apprentice Teaching. A designated institution score report should be sent to UTC (Score Recipient Code R1831); it is suggested that an additional report be sent to the Tennessee State Department of Education (Recipient Code R8190).

#### • Apprentice Teaching Application:

Applications for Apprentice Teaching are located on the UTeaChattanooga website at http://www.utc.edu/academic/UTeaChattanooga/. Completed applications are to be submitted to the UTeaChattanooga office, Collins Street Annex.

Students who wish to enroll in Apprentice Teaching for the fall semester must submit their applications by the previous March 1<sup>st</sup>. For those who seek spring Apprentice Teaching, the application deadline is the previous September 1<sup>st</sup>. Applications must be signed by a UTeaChattanooga advisor.

Students participating in Apprentice Teaching must concurrently enroll in Apprentice Teaching Seminar and may not enroll in additional coursework except under specified conditions.

A mandatory orientation meeting is held on the Reading Day preceding the Apprentice Teaching semester. Students who have met all requirements or who expect to meet all requirements <u>must</u> attend

this meeting. Students are informed of their placements shortly before the beginning of the semester.

The first two days of the Apprentice Teaching experience semester are spent in seminars on the UTC campus. Seminars are also held at UTC before the second placement begins. Additional seminars take place at various times during the semester and many be at UTC or on-site.

# • <u>Hamilton County Substitute Teacher Application and Training</u>

The UTeaChattanooga program has partnered with Hamilton County schools in a unique relationship that allows Apprentice Teachers the opportunity to serve as PAID substitute teachers if they must stand in for their cooperating teachers in the event of their absences. This should ideally only occur after midterm. UTeaChattanooga Apprentice Teachers must submit an application and participate in a day-long substitute teacher training session provided by Hamilton County (from 8:30 am to 3:30 pm) and be fingerprinted again. This second fingerprinting will suffice if Hamilton County employs UTeaChattanooga students as teachers or as substitute teachers and will not have to be redone. From the date Apprentice Teaching ends, UTeaChattanooga students may work as substitute teachers until they obtain a permanent teaching position.

### UTSM 4020: Apprentice Teaching (9)

Closely supervised field coursework in a cooperating school. Experience includes carrying out the duties of a secondary or middle grades teacher. Pass/fail basis only. *Pre-requisite: UTSM 1010, 1020, 2010, 2020, 3010, 3020, 4010, with grades of at least C; admission to UTeaChattanooga; concurrent enrollment in UTSM 4050, approval or preliminary portfolio by the UTeaChattanooga program.* 

### **Apprentice Teaching general information:**

The purpose of Apprentice Teaching is to offer UTeaChattanooga students a culminating experience that provides them with the tools

needed for their first teaching experience. In Apprentice Teaching, students are immersed in the expectations, processes, and rewards of teaching. When making placements, UTeaChattanooga master teachers consider each apprentice teacher's characteristics and abilities as well as the cooperating teacher's teaching and mentoring styles. The hope is that the complementary strengths of the UTeaChattanooga apprentice teacher and cooperating teacher will generate a synergism that benefits both people professionally.

An underlying philosophy of the UTeaChattanooga program is that with extensive, individualized, and ongoing coaching, pre-service teachers' skills will improve at an accelerated rate. The UTeaChattanooga Apprentice Teaching program exemplifies this philosophy. In addition to the mentoring provided by the classroom teachers to which the apprentice teachers are assigned and observations made by master teachers, trained observers with considerable teaching experience provide extensive and regular feedback.

Because Apprentice Teachers have taught at various levels in previous UTeaChattanooga courses, thev assume teaching responsibilities quickly in Apprentice Teaching, which is their final teaching semester, and maintain their role as teacher for the equivalent of two six-week grading periods. Apprentice Teaching students are required to teach two sections of a science, math, or computer science class in a public middle and high school. They remain on the campus a minimum of five hours a day. In addition, Apprentice Teachers are required to complete district requirements to qualify as substitute teachers, so they may substitute for their cooperating teacher in an event of an absence.

**Apprentice Teaching assessment:** All observations of an Apprentice Teacher are based on elements of the Teacher Development Rubric (TDR), which is aligned with the state standards.

Master teachers observe Apprentice Teachers at least once during the semester. If an Apprentice Teacher is having difficulties, more visits are required. UTeaChattanooga's goal is to provide whatever coaching is required to ensure that all UTeaChattanooga students reach a demonstrated minimum level of competence upon the completion of their apprentice teaching experience. The master teachers provide guidance on various needs of Apprentice Teachers, including help with the curriculum, pacing, classroom management strategies, how to work with colleagues in schools. Job interviewing, and selection of compatible school environments as future job sites.

UTeaChattanooga hires experienced, successful teachers to serve as university facilitators who work closely with Apprentice Teachers. Each student is observed a minimum of 10 times by university facilitators Some of the facilitators are retired teachers; others are temporarily on leave from teaching and want a part-time job. They attend training sessions each semester and are given detailed guidance and rubrics on what to look for and emphasize as the semester progresses. They observe Apprentice Teachers weekly, conduct follow-up conferences, and remain in close email contact with the Apprentice Teachers. Whereas the classroom cooperating teachers are expected to provide content expertise, the university facilitators focus primarily on classroom management and general pedagogical strategies. Occasionally, a university facilitator serves as a resource when an Apprentice Teacher and the cooperating teacher have difficulties communicating or understanding expectations. A university facilitator also serves as a liaison between the university and the classroom teacher.

The following focused observation forms are complete by the university facilitator. They may also be used by master teachers and the mentor teacher during their observations: Classroom Environment, Equity, Individualized Instruction, Instruction and Delivery, Professional Responsibilities, Subject Matter Knowledge and Teaching Preparation. In addition, a mid-semester formative evaluation of Apprentice Teachers using the Teacher Development Rubric (TDR) is completed during a three-way meeting of the Apprentice Teacher, cooperating teacher and university facilitator at the semester's midpoint. A final summative evaluation of Apprentice

Teachers using the TDR will be completed during a three-way meeting of the Apprentice Teacher, cooperating teacher and university facilitator. These assessment forms can be located on the UTeaChattanooga website under "forms."

#### Seminar general information:

Master teachers teach the seminar, share their teaching experiences and facilitate discussions, helping apprentice teachers develop their own successful teaching identities. The Apprentice Teaching seminar provides a supportive environment where apprentice teachers share their experiences and work on solutions to difficulties they are experiencing. The seminar objectives and activities are aligned with the state of Tennessee's standards for new teachers. The apprentice teachers demonstrate that they meet the state standards by preparing and submitting a final portfolio.

## • <u>Updated resumes:</u>

On Reading Day **PRIOR** to the Apprentice Teaching semester, each student will submit 5 copies or his/her resume to include expected graduation date and any other relevant experiences.

# **CHECKPOINT 4**

- Successful completion of Apprentice Teaching
- Required documentation

### • Successful completion of Apprentice Teaching:

Apprentice teachers must successfully complete two assigned placements. One placement is typically in a rural school setting and the other an urban setting. One of these will be a high school and the other a middle school. Placements are assigned by the UTeaChattanooga office, Collins Street Annex. The Apprentice Teaching assignment depends on state requirements for the licensure area.

### **Required Documentation**

NOTE: Detailed information about the entire Apprentice Teaching experience can be found in the UTeaChattanooga Apprentice Teaching Handbook, located on the UTeaChattanooga website.

#### • Portfolio evaluation

The final portfolio, produced during the Apprentice Teaching semester, further develops the skills of the preliminary portfolio. There is an expectation of greater depth, maturity, and competence at this level, as students are preparing to launch their careers as professionals.

The portfolio evaluation rubric is located on the UTeaChattanooga website and is used by evaluators for both the preliminary and final portfolios. To pass the final portfolio, students must earn a score of at least 2 on each major section of the portfolio.

#### • Reflection evaluations

Apprentice teachers must complete one self-reflection per week on that week's apprentice teaching experiences and submit via email to his or her assigned evaluator. More information about this requirement is located in the UTeaChattanooga Apprentice Teaching Handbook available on the UTeaChattanooga website.

#### School Culture evaluations

Apprentice teachers complete four school culture assignments for each placement: (1) cooperating teacher interview about classroom culture, (2) documentation of culture of school where they are teaching, (3) documentation of contact with parents and reflection on the impact of parent contact on classroom climate, (4) reflection upon the strengths and weaknesses of the school where they are teaching. Additional information about these assignments will be provided by UTeaChattanooga master teachers at the Apprentice Teaching meeting on Reading Day prior to AT semester and during the course of the AT experience. Evaluation forms for these assignments will be provided to students by master teachers.

#### Secondary student learning evaluations

Apprentice Teachers must provide evidence of 6-12 student learning per placement via administration of a pre and post test over a specific segment of instruction on a particular content topic. Apprentice Teachers must analyze these data by submitting them in graphical format, and preparing a narrative component regarding these data. More information regarding this requirement will be provided by master teachers during Reading Day.

### Summary of Hours forms

The Summary of Hours form is located in the UTeaChattanooga Apprentice Teaching Handbook, located on the UTeaChattanooga website. This form must be completed at *each* placement. First placement Summary of Hours forms must be submitted at the Apprentice Teacher meeting following the first placement and second placement Summary of Hours

forms must be submitted at the final Apprentice Teacher meeting on Reading Day.

#### Focused Observation forms

The following focused observation forms must be submitted electronically by the university facilitator at the end of each placement: classroom environment, equity, individualized instruction, instruction and delivery, professional responsibilities, subject matter knowledge, and teaching preparation. First placement forms must be submitted before students may begin second placements. These forms are located in the UTeaChattanooga Apprentice Teaching Handbook on UTeaChattanooga website: the http://www.utc.edu/academic/UTeaChattanooga/

#### • Completed final evaluation with scores above 2 in all areas

Final Evaluation Forms are located in the UTeaChattanooga Handbook on the UTeaChattanooga website but are completed electronically by cooperating teachers and master teachers. The evaluation forms must be completed for *each* placement. A successful first placement evaluation must be submitted electronically before you will be allowed to begin your second placement.

### Updated resume

An updated resume must be submitted electronically to the UTeaChattanooga office prior to graduation.

# • Submission of time capsule with future address

Apprentice Teachers must complete and submit electronically a "Time Capsule" providing overall reflections on their teaching experience, as well as updated contact information. The Time

Capsue is provided in the UTeaChattanooga Apprentice Teaching Handbook on the UTeaChattanooga website.

# **Post Graduation**

- Complete demographic survey annually
- Submit induction years' reflections/perceptions

### • Complete demographic survey annually

A demographic survey will be emailed to you once a year for two years following your graduation from UTC. Please complete this survey and email it back to UTC. This information is important for assessment purposes and so that you can continue to receive UTeaChattanooga induction support.

#### • Submit induction years' reflections/perceptions

UTeaChattanooga values your perceptions and reflections upon your experiences as a newly licensed and practicing teacher. Therefore, we ask that you complete regular reflective pieces regarding your experiences as a new teacher and submit them to the UTeaChattanooga office. More information about the induction experience will be provided during your tenure as an apprentice teacher.

#### **UTeaChattanooga Induction Support**

UTeaChattanooga will provide personalized support and resources to you as a new practicing teacher for two years beyond graduation. The goals of this support are to (1) increase retention of UTeaChattanooga graduates in the classroom, (2) increase student achievement in new teachers' classrooms, and (3) move new teachers along a continuum from novice to expert teachers. You may select services regarding planning lessons, strengthening content and delivery, using effective classroom management and procedures, setting up your classroom, using technology in the classroom, using feedback from student work to inform instruction, applying principles of learning, navigating in a new school district or campus,

responding to the unique needs of students, consulting with a master teacher, writing grants, applying for professional development opportunities, and guidance in winning awards. In addition, you may wish to borrow resources from our lending library that houses an extensive inventory of materials new teachers can use in their classrooms or arrange for telementoring througu WINGS (Welcoming Interns and Novices with Guidance and Support). WINGS Online provides guidance and support for apprentice teachers as well as first and second year teachers from the UTeaChattanooga program. WINGS' one-to-one telementoring services offer personalized, professional assistance from an experienced mentor educator. More information about WINGS can be found on the UTeaChattanooga website.

### <u>UTeaChattanooga Guidelines and Policies</u>

#### • Statement of Ethics

#### **Code of Ethics of the Education Profession Preamble**

The educator, believing in the worth and dignity of each human being, recognizes the supreme importance of the pursuit of truth, devotion to excellence, and the nurture of the democratic principles. Essential to these goals is the protection of freedom to learn and to teach and the guarantee of equal educational opportunity for all. The educator accepts the responsibility to adhere to the highest ethical standards.

The educator recognizes the magnitude of the responsibility inherent in the teaching process. The desire for the respect and confidence of one's colleagues, of students, of parents, and of the members of the community provides the incentive to attain and maintain the highest possible degree of ethical conduct. The Code of Ethics of the Education Profession indicates the aspiration of all educators and provides standards by which to judge conduct.

The remedies specified by the NEA and/or its affiliates for the violation of

any provision of this Code shall be exclusive and no such provision shall be enforceable in any form other than the one specifically designated by the NEA or its affiliates.

#### PRINCIPLE I

#### **Commitment to the Student**

The educator strives to help each student realize his or her potential as a worthy and effective member of society. The educator therefore works to stimulate the spirit of inquiry, the acquisition of knowledge and understanding, and the thoughtful formulation of worthy goals.

In fulfillment of the obligation to the student, the educator--

- 1. Shall not unreasonably restrain the student from independent action in the pursuit of learning.
- 2. Shall not unreasonably deny the student's access to varying points of view.
- 3. Shall not deliberately suppress or distort subject matter relevant to the student's progress.
- 4. Shall make reasonable effort to protect the student from conditions harmful to learning or to health and safety.
- 5. Shall not intentionally expose the student to embarrassment or disparagement.
- 6. Shall not on the basis of race, color, creed, sex, national origin, marital status, political or religious beliefs, family, social or cultural background, or sexual orientation, unfairly
  - a. Exclude any student from participation in any program
  - b. Deny benefits to any student
  - c. Grant any advantage to any student
- 7. Shall not use professional relationships with students for private advantage.
- 8. Shall not disclose information about students obtained in the course of professional service unless disclosure serves a compelling professional purpose or is required by law.

#### PRINCIPLE II

#### **Commitment to the Profession**

The education profession is vested by the public with a trust and responsibility requiring the highest ideals of professional service. In the belief that the quality of the services of the education profession directly influences the nation and its citizens, the educator shall exert every effort to raise professional standards, to promote a climate that encourages the exercise of professional judgment, to achieve conditions that attract persons worthy of the trust to careers in education, and to assist in preventing the practice of the profession by unqualified persons.

In fulfillment of the obligation to the profession, the educator—

- 1. Shall not in an application for a professional position deliberately make a false statement or fail to disclose a material fact related to competency and qualifications.
- 2. Shall not misrepresent his/her professional qualifications.
- 3. Shall not assist any entry into the profession of a person known to be unqualified in respect to character, education, or other relevant attribute.
- 4. Shall not knowingly make a false statement concerning the qualifications of a candidate for a professional position.
- 5. Shall not assist a noneducator in the unauthorized practice of teaching.
- 6. Shall not disclose information about colleagues obtained in the course of professional service unless disclosure serves a compelling professional purpose or is required by law.
- 7. Shall not knowingly make false or malicious statements about a colleague.
- 8. Shall not accept any gratuity, gift, or favor that might impair or appear to influence professional decisions or action.

Adopted by the NEA 1975 Representative Assembly

#### **Honor Code**

The University of Tennessee at Chattanooga Honor Code is based upon the assumption that the student recognizes the fundamental importance of honesty in all dealings within the University community and that education is a cooperative enterprise between student and teacher and between student and student. Any act of dishonesty violates and weakens this relationship and lessens the value of the education which the student is pursuing. The Honor Code and the Honor Court and its procedures are detailed in the

#### Student Handbook.

The Honor Code is violated by various types of misrepresentation or acts of dishonesty which bear on the academic evaluation of a student. The following are a few examples (not all inclusive) of violations of the Honor Code:

- a) Failure to adhere to the Honor Code Pledge.
- b) Bringing unauthorized material into examination area.
- c) Making use of unauthorized assistance during an examination or in preparing a graded assignment.
- d) Incorporating words or ideas of another author in a research paper without giving proper credit to the source.
- e) Making unacknowledged use of another's computer program.
- f) Cases involving aggravating circumstances (e.g., selling answer keys, tests or papers) will beconsidered more serious violations.
- g) Assisting in any act of dishonesty including, but not limited to, the above examples.
- h) If an offense includes both academic aspect (an Honor Code violation, e.g., cheating) and a social conduct violation (which is under the jurisdiction of the disciplinary dean and the Student Council Board, e.g., unauthorized entry), it should result in two separate hearings and the possibility of two separate penalties.

# **Students with Special Needs**

If you are a student with a disability and think that you might need special assistance or a special accommodation in any class, call the Office for Students with Disabilities/College Access Program at 425-4006 or come by the office in 110 Frist Hall. Examples of disabilities might include blindness/low vision, communication disorders, deafness/hearing impairments, emotional/psychological disabilities, learning disabilities, and other health impairments. This list is not exhaustive.

The Americans with Disabilities Act (ADA) of 1990 protects persons who have a physical or mental impairment that substantially limits one or more of the major life activities (walking, talking, hearing, seeing, and working), a record of such an impairment, or one who is regarded as having such a qualified impairment. The ADA also protects individuals with "hidden" disabilities such as multiple sclerosis, epilepsy, learning disabilities,

narcolepsy, severe arthritis, and mental illness. In working with students, reasonable accommodations may be required in the areas of testing, class location, class presentation, reader services, interpreter services, etc. The OSD/CAP staff will assist individual professors and departments to coordinate academic support services for the self-identified, disabled student population. The OSD/CAP Office serves as a resource for questions, concerns, and issues related to appropriate accommodations offered to our UTC students with qualified disabilities as they continue their academic progress. For more information, contact the office at 425-4006.

#### **Non-Discrimination Policy**

The University of Tennessee at Chattanooga does not discriminate on the basis of race, sex, color, religion, national origin, age, handicap, or veteran status in provision of educational opportunities or employment opportunities and benefits. The University does not discriminate on the basis of sex or handicap in the education programs and activities which it operates, pursuant of the requirement of Title IX of the Education Amendments of 1972, Public Law 93-112; and the Americans with Disabilities Act of 1990, Public Law 101-336, respectively. This policy extends to both employment by and admission to the University. Inquiries concerning Title IX, Section 504, and the Americans with Disabilities Act should be directed to the Office of the Director for Affirmative Action, 104 Founders Hall, (423) 425-4124. Charges of violation of the above policy should also be directed to the Office of the Director for Affirmative Action.

# **UTeaChattanooga Internship Opportunities**

The UTeaChattanooga program is designed to recruit and train talented math and science majors to become secondary teachers while they obtain a degree in the math or science field of their choice. As part of the training for these future secondary teachers, UTeaChattanooga offers our students paid internships with local schools or nonprofit agencies which are associated with the math and science community.

The interns in the UTeaChattanooga program are allowed to work up to 20 hours per week during the fall and/or spring semesters. This

allows the UTeaChattanooga students to supplement their income while gaining skills that will help them become better teachers.

At the beginning of each fall and spring semester, students are informed about possible internships and will be able to access a list of possible placements on our website.

# http://www.utc.edu/academic/UTeaChattanooga/

Those students who choose to participate will be allowed to select the site at which they would like to work.

To be eligible to serve as an intern, interested UTeaChattanooga students must complete and submit a "UTeaChattanooga Internship Choice Form." All students serving as interns must have successfully completed Steps One and Two with a grade of at least "c."

After the Internship Choice Form is completed and submitted, students will be notified whether or not they have been accepted as an intern. Upon acceptance, interns' first assignment is to visit the intern site supervisor and conduct an interview utilizing the "UTeaChattanooga Internship Program Site Supervisor Interview."



# **UTeaChattanooga Internship Choice Form**

### **Internship Requirements:**

- 1. Interns must have successfully completed Steps One and Two with a grade of at least "C."
- 2. Interns must have a GPA of 2.5 or higher (UTC, cumulative, content and UTSM).
- 3. Interns must be enrolled in a UTeaChattanooga class during the semester of their internship.
- 4. Interns should attend their UTeaChattanooga classes on any day for which they claim internship hours. It is not acceptable to be too sick for class, but well enough for your internship on the same day!

# How to Apply:

- 1. Research the internship options listed on the UTeaChattanooga website. If you contact any site at this time, please make it known that you are just seeking information and that you have not yet been assigned to an internship.
- 2. Request an Employment Packet in the UTeaChattanooga Office in the Collins Street Annex.
- 3. List your top three internship choices below and complete the information on the next page (or back) of this form.
- 4. Return this form to the UTeaChattanooga offices as soon as possible.
- 5. An attempt will be made to match you with your first internship site choice. You may not get your first choice. Internships are generally assigned on a "First-come, first-served" basis, with priority given to students returning to a previously-held internship.
- 6. The coordinator will email you an internship offer. You will then call your internship site, inform them that you have accepted the internship, and arrange a start date. **Do not start**

until you have received an email assigning you to your internship and you have contacted your internship site.7. You will be appointed by the UTeaChattanooga office and contacted about completing your payroll information online.

Name	Student ID
Email Address	Phone Number
What is your major?least 2.5?	Do you have a GPA of at
What UTeaChattanooga class will you ta	ke during your internship?
Did you have an internship last semester continue with that internship?	
List your top three internship choices:	
#1 Choice: Organization:	
Approximate # hrs. you wish	to work per week:
#2 Choice: Organization:	
Approximate # hrs. you wish	
#3 Choice: Organization:	
Approximate # hrs. you wish	
For each of the following UTeaChattanoon the semester and year in which you compyou plan to take the course.	_
Step 1	

Step 2	
Knowing & Learning	
Classroom Interactions	S
Perspectives	
Research Methods	
Project-Based Instr.	
Apprentice Teaching	
Read and Sign Below:	
before starting word  2. I understand that if from UTeaChattan  3. I understand that if well as that of my if well as that of my if well as that of my if attended that if attended that if well and that if and that I am to accord others.  7. I have read and understand that I is a contact and understand and understand and understand and understand that I is a contact and understand a	I may not start work until I have received an email along with my internship assignment. Each time sheet I submit requires my signature as site supervisor. It ime sheets must be turned in by the appropriate time sheets.) I my work hours CANNOT EXCEED 8 HOURS HOURS PER WEEK. If am representing the UTeaChattanooga program at professionally and respectfully when dealing with the derstand the Code of Ethics.  Id, understand, and will comply with the
Signature	Date

Please contact the UTeaChattanooga office at any time during the semester if you have questions, concerns, or comments about your internship.



# UTeaChattanooga Internship Program Site Supervisor Interview

Your first assignment as a UTeaChattanooga intern is to sit down with your site supervisor and fill out this sheet. This process is designed to ensure that you have a clear vision of your responsibilities and your role at your particular internship site. In addition, this process should help you set some goals for what you would like to accomplish during the semester. Once you complete this form, you should be sure that both you and your supervisor have a copy. In addition, you will need to turn in a copy of this sheet with your first time card.

_

What are my primary roles and responsibilities at this site?

What key standards for safety and conduct toward students are associated with this role?

What expectations do you have for me while in this internship?
Work with your supervisor to set some goals for yourself in this semester. What skills do you want to work on? What will help you become a better teacher? Two goals that I would like to achieve through this internship are:
1
2.

# **UTeaCHattanooga Internships**

#### • UTC Student Success Center

322 University Center 425-4286 Dr. Mary Robinson Roland, Director Mary-Roland@utc.edu

- 1. Peer Mentoring Program: UTeaChattanooga students serve as peer mentors to incoming at-risk freshmen to aid them in adjustment to college and campus resources. *Limited to UTC juniors and seniors*.
- 2. Supplemental Instruction: UTeaChattanooga students tutor students in introductory math and science courses via informal sessions in which the mentee's course notes are reviewed, assigned readings are discussed, organizational tools are shared and examinations are prepared for. *Limited to UTeaChattanooga sophomores, juniors and seniors*.

# Upward Bound

02 Stagmaier Hall Sandy Cole, Interim Director 425-4691 Sandy-Cole utc.edu

1. Tutor: UTeaChattanooga students tutor 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> grade students in math and science who are participants in the Upward Bound program.

# • <u>UTC Jones Observatory</u>

Physical Address: 10 Tuxedo Ave., Chattanooga, TN

UTC Address: 340 EMCS Bldg. 425-4518 Mr. Jack Pitkin, Director

1. Lead instructional sessions on various topics during observatory times at the Jones Observatory (planetarium) and supervise telescopic viewing. Sample topics: The Moons of Jupiter, Elementary Astroimaging and Saturn. Limited to UTeaChattanooga students with astronomy backgrounds.

# • The Tennessee Aquarium

One Broad Street Chattanooga, TN 37402 George Barton, Education Director

1. Lead instructional programs for visiting K-12 students, aid in the development of curriculum for visiting K-12 students.

# • UTC Chemistry Department

Grote Hall Dr. Jim Narramore Jim-Narramore@utc.edu

1. Serve as a chemistry lab teaching assistant. Limited to UTeaChattanooga students who have completed CHEM 1110, 1110L, 1120, and 1120L with a grade of at least B.

# **UTeaChattanooga Scholarship Opportunities**

• Ralph T. and Alice P. Call Scholarship: Established in 1999 by Harry Call, class of 1971, to honor his parents, Ralph T. and Alice P. Call. Restricted to students majoring in engineering.

# • Mario and Grace Charles Foundation Scholarship:

Established in 1999 by the estate of Grace B. Charles to provide scholarships for students majoring in electrical engineering and in elementary education.

# • Carl Gibson Scholarship:

Established in 1994 by the estate of Carl Gibson, University of Chattanooga, class of 1934 and former owner of Ruby Falls. The scholarship is based on academic performance and financial need.

# • Dr. William Q. Gurley Scholarship:

Established in 1999 by Joe and Marianna Wheeler in memory of Dr. Gurley, UTC professor of mechanical engineering and former department head, awarded to sophomore, junior, and senior students enrolled in the College of Engineering.

# • Russell M. Hart Scholarship:

Established in 2005 by the will of Russell Hart, a 1937 graduate of the university. Awards are made based on academic performance and financial need.

# • Harold Marlowe Scholarship in Physics:

Established in 1999 by Betsy Marlowe Bush in her desire to honor her son, UTC Professor of Physics Robert Marlowe. Award is made to a student in the physics department.

# • Stan McCay Scholarship:

Established in 2006 in memory of Mr. McCay, former employee of the Combustion Engineering Metallurgical Research Lab. He worked for 27 years in the quality control support areas of the company and had assignments in Spain,

Canada and throughout the United States. The scholarship is for students majoring in chemical engineering.

### • Toby and Brenda McKenzie Education Scholarship:

Established in 1997 by entrepreneurs Toby and Brenda McKenzie of McKenzie Development Corporation of Cleveland in appreciation of the great influence of good teachers in their formative years. The award is meant to encourage and assist students preparing to become educators.

# • Newbold Scholarship:

Established in 2000 as a memorial to Dr. Nathan C. Newbold, his son, Nathan Newbold, Jr., and his grandson, Nathan C. Newbold III. Preference of the award is made to deserving African-American students who show promise in both academics and integrity.

### • Jenks Fain Parker Memorial Scholarship:

Established in 1984 by the family of Jenks Fain Parker. The scholarship is awarded to deserving students in the College of Engineering and Computer Science as recommended by the UTC Scholarships Committee.

# • Ray Robinson, Jr., and Nancy Robinson Oliver Scholarship:

Established inn 1999 by Jimmie Robinson and Ray Robinson, Sr., in memory of their son, Ray Robinson, Jr., engineer and UTC graduate, and in honor of their daughter, Nancy Robinson Oliver, also a UTC graduate who is active in community service. This scholarship is based on academic performance.

# • Howard L. Westbrook Scholarship:

Established in 1993 by alumnus Howard L. Westbrook of Fairhope, Al., class of 1958, for students studying science or engineering.

# Marvin L. Anthony Scholarship:

Established in 1965 by Chicago banker, Marvin L. Anthony, a 1926 chemistry graduate and Phi Delta Sigma member, for students of business or chemistry.

# • Clayton Arnold Teacher Training Scholarship:

Established in 1965 by Clayton Arnold, who had a strong interest in the education of teachers. For aspiring teachers.

### • Dr. Bernard W. Benson Memorial Scholarship:

Established in 2001 by Marilyn Benson and friends and colleagues of Dr. Bernard Benson, who taught in the Teacher Preparation Academy and was the first director of the Challenger Center. First consideration given to students wishing to teach high school science.

### • Dr. Wilbur K. Butts Memorial Scholarship:

Established in 1993 through a bequest from the estate of Alfred M. Butts in honor of his late mother, who was a faculty member for many years in the department of biology. The award goes to entering freshmen with demonstrated academic performance who wish to major in biological science.

# • Edwin P. Duckett Memorial Scholarship:

Established in 2002 to honor the late Mr. Duckett, a University of Chattanooga engineering physics graduate and retired vice president of Combustion Engineering, Inc., Preference is for engineering majors.

# • Nita T. and Irvine W. Grote Scholarship:

Established in 1976 by the Chemistry Department in memory of Dr. and Mrs. Grote. Grote served as a distinguished member of the chemistry faculty from 1931-1969. Endowment income annually provides scholarships for 12 outstanding chemistry majors.

# Marjorie Fox Higdon Chemistry Scholarship:

Established in 2001 by Marjorie Higdon to provide book stipends for chemistry majors.

### • Dr. Karl Hujer Scholarship:

Established in 1990 through a bequest from the estate of Harriet Hunt Hujer in memory of her husband, Dr. Karl Hujer, an internationally known astronomer on the faculty of UTC, for students majoring in astronomy, physics, or mathematics.

### • John W. Jayne Memorial Mathematics Award:

Established in 1994 by family and colleagues in memory of Dr. John W. Jayne, a member of the Department of Mathematics for 22 years. The award is given each year to an outstanding sophomore mathematics student.

### • Norbert Koch Scholarship:

Two funds established in 1979 by gifts from former students, colleagues, and citizens of the Chattanooga community in honor of Dr. Norbert Koch, professor of engineering, on the occasion of his retirement after 32 years of dedicated service to UTC to be awarded annually to a qualified and deserving engineering student.

# • Winston L. Massey Scholarship:

Established in 1973 by the University of Chattanooga Foundation in honor of Masset, Guerry Professor of Mathematics, on the occasion of his retirement after 40 years of service to his alma mater, for an outstanding upperclassman majoring in mathematics.

# Mary Alice McBrayer Memorial Scholarship:

Established in 1993 by Brig. General Madison M. McBrayer (retired, USAF) class of 1941, and his three sons: Gregory ., class of 1969, Kenneth and Steven, in honor of their wife and mother. The award goes to sophomores or above majoring in engineering.

# • Ruth Clark Perry Scholarship:

Established in 1969 by Mrs. Leonora Miller Seids in memory of her friend, UC Dean of Women from 1924 to 1943 and professor of mathematics from 1922 until her death in 1955, to be awarded to an upperclass woman majoring in mathematics.

# • Murray Raney Chemistry Scholarship:

Established in 1989 by W.R. Grace and Company in memory of Murray Raney, who died in 1966 and was a distinguished Chattanoogan who gained world-wide fame among chemists for his invention of metal catalysts, the basis for the continuing activity of W.R. Grace and Co. The scholarship is for a chemistry major.

# • Dr. J. Eric Schonblom Scholarship:

Established in 1997 by friends, colleagues and family of Dr. Schonblom in honor of his retirement from the faculty of the College of Engineering and Computer Science. The award goes to students majoring in engineering.

# • LaVerne Thompson Memorial Scholarship:

Established in 1987 by Dr. Jack Thompson, professor and head of computer science, and his children in memory of his wife, a former UTC faculty member. Preference is given to female students majoring in computer science.

# • Lebron Carver Memorial Scholarship:

Established in 2007 with a bequest from the estate of Labron Carver, a 1950 Alumnus. Scholarship awarded to students majoring in geology.

# • Jack C. Marcellis Civil Engineering Scholarship:

Established in 2003 by Nancy Wofford Marcellis in honor of her husband. Award is designated for full time junior or senior with a minimum 3.0 GPA in Civil Engineering Program.