

# ***HUMAN OSTEOLOGY, FALL 2020***

## **ANTH / BIOL 4406.001/.002**

**INSTRUCTOR:** Dr. Naomi Cleghorn  
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Office Hours: Tuesday/ Thursday 3 – 5:30 pm *or by appointment* (email me!)  
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**SCHEDULED CLASS TIME:** Tuesday/Thursday 12:30 – 1:50 pm, 2:00 – 2:50 pm

**CLASSROOM:** Labs and Practical Exams are held in University Hall 468

### **COURSE DESCRIPTION (COVID 19 VERSION):**

A complete understanding of the human skeleton is essential to the study of any sub-field of biological anthropology, including bioarchaeology, human anatomy, paleoanthropology, forensic analysis, and related fields. This class is an intensive introduction to the human skeleton, in which students learn how to identify both whole and fragmented bones, and isolated teeth. In lecture, we cover the anatomy of individual bones, with references to functional morphology, bone growth, individual variation, and the over-lying soft tissue components. In addition, students are briefly introduced to bioarchaeological issues, including the analysis of sex, age and health, the ethics and legality of human skeletal analysis, the identification of trauma and pathology, and the use of histological, isotopic, and genetic analysis of the human skeleton. Most lectures on skeletal systems will be provided online asynchronously, and students are encouraged to submit questions within a linked discussion page. Student comprehension of these lectures is assessed in the final written exam.

The class also includes a substantial laboratory component during which students are expected to apply the anatomical information from lectures, online demonstrations, and the textbook to their own examination of the skeleton. Understanding the skeletal system requires contact with skeletal materials. In the current pandemic conditions, facilitating this contact is complex, and students will have to work hard to ensure that they are getting the most out of each in-class lab session. Thus, all assignments (drawings) as well as study of the specimens online and in the textbook should be completed *before* students step into the lab. Students should not come to lab without first reviewing all required structures and assigned features. In lab, I will ask students to point out structures and landmarks on bone, and I will then provide feedback and guidance. Prior to lab times, I will host online orientations to all of these features. Students should attend these *synchronously* whenever possible, and have their replica skeleton available during this time.

Providing safe lab access will require strict adherence to distancing and PPE protocols as described below. My goal is to provide each student with the ability to physically examine skeletal materials in lab for ~1.5 hours per week (with no more than 4 students in the room at once). Ninety minutes is very little time to develop a detailed mental map of the skeleton, hence the need for preparations noted above. Attendance at in-person lab sessions is not required, and students may opt to work entirely at home with their replica study specimen. However, in-person lab attendance will allow students to work with fragmented remains (which will appear on practical exams), and see features in greater detail than possible on a plastic cast.

Practical lab exams are scheduled as in-person exams. However, if a student would prefer to take the practical exam online, I will try to accommodate this request. Students must discuss this with me during the first week of class. An online version of the practical exams will likely be run as synchronous, online meetings with me in which I will provide images for immediate student identification.

## STUDENT LEARNING OUTCOMES:

By the end of the course, students are able to:

- Identify both whole and fragmentary human remains to skeletal element.
- Identify anatomical landmarks on bones and teeth.
- Understand bone microstructure.
- Explain the relationship between soft structures, such as muscles and blood vessels, and bone.
- Apply basic concepts of anatomical functional morphology, including anatomical lever systems.
- Understand basic bone biomechanics.

## REQUIRED TEXTS AND LAB ITEMS:

*TEXT: Human Osteology, 3rd edition*, by White, Black and Folkens (2011, Academic Press) is the required text. This book has undergone substantial revision, so I do not recommend earlier editions. Both rental and used options are available online.

(Note – there are some errors in the muscle attachment origin/insertion figures. You will receive supplemental handouts for these)

*STUDY SPECIMEN:* Replica, **full size** human skeleton, **with bisected cranium and one set each of an articulated and a disarticulated hand and foot**. This model (link on amazon) is recommended (either used or new). I suggest you order this early as supplies may be quite limited in the fall.

[https://www.amazon.com/Disarticulated-Skeleton-Medical-Quality-Height/dp/B00RLTL2HI/ref=sr\\_1\\_3?dchild=1&keywords=medical+quality+skeleton&qid=1590708905&s=industrial&sr=1-3](https://www.amazon.com/Disarticulated-Skeleton-Medical-Quality-Height/dp/B00RLTL2HI/ref=sr_1_3?dchild=1&keywords=medical+quality+skeleton&qid=1590708905&s=industrial&sr=1-3)

LAB PPE: Mask (~15 disposable), nitrile gloves (~15 pairs), face shield (at least 1)

## REQUIREMENTS / GRADING:

### GRADING SCALE:

Grades for assignments and tests are posted to Canvas as soon as possible. It is your responsibility to track your progress and determine that grades have been entered correctly to Canvas. If you find a discrepancy, contact me immediately.

Your total course grade will be determined based on the following scale.

90% and greater	A
80% to 89%	B
70% to 79%	C
60% to 69%	D
Less than 60%	F

\* A .5% is rounded to next higher grade.

You will be graded on multiple assignments and tests. These can be broken down into the categories detailed below. The value of each grade category is given as a percentage of the total grade. In addition to providing grades for individual assignments, I provide (via Canvas) a summary grade for each of these categories (for example – “Quiz grade”). You can use these summaries to figure out how you are doing.

<b>Requirement</b>	<b>% of Course Grade</b>
<b>Lab Notebook</b>	<b>15%</b>
<b>Online Quizzes</b>	<b>10%</b>
<b>Practical Exam 1</b>	<b>15%</b>
<b>Practical Exam 2</b>	<b>20%</b>
<b>Practical Exam 3</b>	<b>25%</b>
<b>Final Written Exam</b>	<b>15%</b>

***LAB NOTEBOOK (15% of total grade):***

Over the course of the semester, students compile a laboratory notebook in which they draw each element, complete with labeled features, and write a brief narrative of useful identifying features. Drawings are NOT graded on artistic ability. The point of this is that the act of creating the image, together with all relevant landmarks, anchors the form in the brain. The drawing must be recognizable to the bone and all labels must be neat, with arrows pointing to the correct feature. Drawings must be completed in the week assigned.

- DO NOT TRACE an image of the assigned bone.
- DO NOT REPRODUCE AND LABEL a printed image.
- Each drawing MUST BE DONE freehand.
- All components of a drawing, including labels, must be done by hand (the narrative paragraph can be typed into Canvas).
- Make each drawing as close to life size as possible (1:1 scale), unless otherwise directed.
- Drawings must be on blank paper or graph paper (not lined paper).
- Drawings will be uploaded as an image to canvas (scan or photo).

Each drawing **MUST** include the following:

- the name of the drawn bone or tooth
- all required landmarks (given in handouts)
- the perspective (i.e., posterior, anterior, superior, inferior, lateral, endocranial, etc.) and side (right, left).
- a short paragraph on identification, siding, or any unique features of the specimen you are drawing.

***ONLINE QUIZZES (10% of total grade):***

Online weekly quizzes must be completed by the end of each week. Although accuracy of answers will be noted (students and the instructor will see outcomes), accuracy on the quiz will not impact the overall course grade. Students are simply required to answer every question in order to get full credit for the quiz – this is a completion grade. That said, the quizzes are one of the best study tools for the 3 major practical exams. Thus, students should strive for excellence on each quiz. I expect students to take these quizzes as closed book, no-notes tests of their own comprehension. There is NO benefit in cheating on these quizzes – you cannot improve your course grade by getting the answers right. However, there is great benefit in working to do so in preparation for exams. All quizzes (and exams) are potentially cumulative. No quiz grades will be dropped.

***PRACTICAL LABORATORY EXAMS (15%, 20%, and 25% of total grade):***

Student comprehension of the human skeleton will be assessed in 3 in-person laboratory exams (although note the online alternative mentioned above). Each exam focuses primarily on new material presented since the previous exam, but is also cumulative and may include fragmentary specimens and isolated teeth. Students will be assigned an exam time and day (within the scheduled class time), and will have approximately 1 hour to complete the exam.

Exams require physical identification of bones, teeth, bone fragments, landmarks, and qualities such as element side. This naturally requires a very high degree of familiarity and direct contact with the bones. In some cases, students may be asked to identify specimens by touch only (if you practice with your study specimen this is not at all difficult). Students will also be expected to know proper anatomical positioning of skeletal specimens relative to each other (that is, students will be asked to lay out a partial skeleton correctly on a table).

**FINAL WRITTEN EXAM (15% of total grade):**

This exam will be online, timed, and open note, and will assess student understanding of course lecture material. Questions will focus on comprehension of anatomical systems, biomechanics, and other properties of the skeletal system.

**RECOMMENDATION REQUESTS:**

If you plan to ask me for a recommendation for employment, graduate school, or any other endeavor upon completion of this course, note that I have the following *minimum* requirements:

- Grade of A or B (depending on the scholarly requirements of the recommendation).
- Excellent participation in both class and lab.
- 2 to 3 weeks notice prior to recommendation deadlines.

**TEST, QUIZ, and DRAWING DUE DATES (quick reference – these are also on the daily schedule below):**

**Note: Quizzes and Drawings are due online by the end of day on the date shown. Exams are individually scheduled with each student.**

<b>DATE</b>	<b>Week</b>	<b>Quiz / Exam</b>
Saturday, August 29 <sup>th</sup>	1	Quiz 1: Orientation, basic anatomical terminology
Wednesday, September 2 <sup>nd</sup>	2	Drawing set 1: Whole Cranium
Friday, September 4 <sup>th</sup>	2	Quiz 2: Whole bones of the articulated skull & sutures, craniometric points
Wednesday, Sept. 9 <sup>th</sup>	3	Drawing set 2: Endocranium/Basicranium
Friday, September 11 <sup>th</sup>	3	Quiz 3: Endocranium, basicranium, skull foramina & other cranial landmarks
Wednesday, Sept. 16 <sup>th</sup>	4	Drawing set 3: Individual bones of the cranium
Friday, September 18 <sup>th</sup>	4	Quiz 4: Individual skull bones & fragments
Wednesday, Sept. 23 <sup>rd</sup>	5	Drawing set 4: Molar schematic
Friday, September 25 <sup>th</sup>	5	Quiz 5: Dentition
Thursday, October 1 <sup>st</sup>	6	<b>Practical Exam 1: Skull and Dentition</b>
Wednesday, Oct. 7 <sup>th</sup>	7	Drawing set 5: Thorax and Shoulder
Friday, October 9 <sup>th</sup>	7	Quiz 6: Thorax and Shoulder
Wednesday, Oct. 14 <sup>th</sup>	8	Drawing set 6: Arm and Forearm
Friday, October 16 <sup>th</sup>	8	Quiz 7: Arm, forearm
Wednesday, Oct. 21 <sup>st</sup>	9	Drawing set 7: Hand
Friday, October 23 <sup>rd</sup>	9	Quiz 8: Hand
Thursday, Oct. 29 <sup>th</sup>	10	<b>Practical Exam 2: Thorax and Upper Limb (cumulative from Exam 1)</b>
Wednesday, November 4 <sup>th</sup>	11	Drawing set 8: Pelvis, Femur
Friday, November 6 <sup>th</sup>	11	Quiz 9: Pelvis & Femur
Wednesday, November 11 <sup>th</sup>	12	Drawing set 9: Leg – Patella, Tibia, Fibula
Friday, November 13 <sup>th</sup>	12	Quiz 10: Patella, Tibia, Fibula
Wednesday, November 18 <sup>th</sup>	13	Drawing set 10: Foot
Friday, November 20 <sup>th</sup>	13	Quiz 11: Foot
Tuesday, November 24 <sup>th</sup>	14	<b>Practical Exam 3: Pelvis and lower limb, skeletal layout (cumulative from Exams 1 and 2)</b>
<b>Tuesday, December 15<sup>th</sup></b>		<b>Online Final Written Exam</b>

**COURSE TOPIC SCHEDULE:** (Subject to revision).

<b>Week / Class</b>	<b>Dates:</b>	<b>Modules and Quizzes:</b>	<b>Lab</b>	<b>Text Chapter</b>
		<b>1. Anatomical terminology and orientation</b> Online Lab Orientation	N/A	1, 2
1	Aug. 27 <sup>th</sup>	Online Quiz 1 - Anatomical terminology and orientation		
		<b>2. Bone Biology &amp; General anatomy of the cranium (whole bones &amp; sutures)</b>	whole cranium	3 4.1-4.6
2	Sept. 1 <sup>st</sup> & 3 <sup>rd</sup>	Online Quiz 2 - Whole bones of the articulated skull & sutures, craniometric points		
		<b>3. Detailed anatomy of the endocranium &amp; basicranium</b>	endocranium and basicranium	<b>Review online materials: Endocranial and basicranial pdfs. cranial nerve supplements</b>
3	Sept. 8 <sup>th</sup> & 10 <sup>th</sup>	Online Quiz 3 - Endocranium, basicranium, skull foramina & other cranial landmarks		
		<b>4. Individual bones of the skull &amp; systems in the skull</b>	individual skull bones & fragments	4.7 - 4.24,
4	Sept. 15 <sup>th</sup> & 17 <sup>th</sup>	Online Quiz 4 – Individual skull bones & fragments		
		<b>5. Dentition (Juvenile and Adult)</b>	dentition	<b>5, Appendix 2</b> <b>18.3 – 18.3.2</b> <b>19.12</b>
5	Sept. 22 <sup>nd</sup> & 24 <sup>th</sup>	Online Quiz 5 – Dentition		
		<b>6. Muscles and movement of the thorax &amp; Thorax: Hyoid, Vertebra, Ribs, Sternum</b>	<b>Lab Practical Exam 1: Skull and Dentition</b>	<b>6, 7</b>
6	Sept. 29 <sup>th</sup> & Oct. 1 <sup>st</sup>			
		<b>7. The Shoulder: clavicle and scapula</b>	thorax and shoulder	8
7	Oct. 6 <sup>th</sup> & 8 <sup>th</sup>	Online Quiz 6: Thorax and shoulder		
		<b>8. Biomechanical lever systems &amp; the Arm (humerus and forearm)</b>	humerus, radius, ulna	9
8	Oct. 13 <sup>th</sup> & 15 <sup>th</sup>	Online Quiz 7: Arm and forearm		
		<b>9. The Hand</b>	hand	10
9	Oct. 20 <sup>th</sup> & 22 <sup>nd</sup>	Online Quiz 8: Hand		
		<b>10. Pelvis – Innominate and Sacrum</b>	<b>Lab Practical Exam 2: Thorax and upper limb</b>	<b>11,</b> <b>18.3.6 – 18.3.8,</b> <b>18.4.4</b>
10	Oct. 27 <sup>th</sup> & 29 <sup>th</sup>			
		<b>11. Femur &amp; thigh muscles, Biomechanics of longbones</b>	Pelvis & femur	12.1 – 12.2
11	Nov. 3 <sup>rd</sup> & 5 <sup>th</sup>	Online Quiz 9: Pelvis & Femur		
		<b>12. Knee and Leg – Tibia, Fibula</b>	Leg: patella, tibia, & fibula	12.3 – 12.5, 14.11 – 14.12
12	Nov. 10 <sup>th</sup> & 12 <sup>th</sup>	Online Quiz 10: Tibia, fibula, patella		
		<b>13. Gait and the foot</b>	foot	13
13	Nov. 17 <sup>th</sup> & 19 <sup>th</sup>	Online Quiz 11: the foot		

			<b>Lab Practical Exam 3: pelvis and lower limb</b>
<b>14</b>	<b>Nov. 24<sup>th</sup></b>		
	<b>Dec. 1<sup>st</sup> &amp; 3<sup>rd</sup></b>		<b>16.6</b>
<b>15</b>		<b>15. Introduction to bioarchaeology</b>	<b>N/A</b>
			<b>18.1 – 18.2, 18.3.3, 18.4 – 18.4.3</b>
<b>16</b>	<b>Dec. 8<sup>th</sup></b>	Review week	<b>N/A</b>
		<i>Written Final Exam (Online)</i>	<b>N/A</b>
<b>17</b>	<b>Dec 15<sup>th</sup></b>		

## COURSE POLICIES:

### Institutional Policies

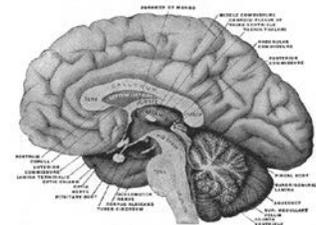
UTA students are encouraged to review the below institutional policies and informational sections and reach out to the specific office with any questions. To view this institutional information, please visit the [Institutional Information](https://resources.uta.edu/provost/course-related-info/institutional-policies.php) page (<https://resources.uta.edu/provost/course-related-info/institutional-policies.php>) which includes the following policies:

- Drop Policy
- Observation of Religious Holy Days
- Disability Accommodations
- Non-Discrimination Policy
- Title IX Policy
- Academic Integrity
- Electronic Communication
- Campus Carry
- Final Review Week
- Active Shooter
- Counseling and Psychological Services (CAPS)
- Student Support Services

### 1. ACADEMIC INTEGRITY POLICY:

Make sure all your work is the product of *YOUR BRAIN!*

As a student of the University of Texas at Arlington, you are expected to maintain the highest standards of academic integrity. Any instance of academic dishonesty will have a significant negative impact on your scholastic record, not to mention your grade in this class.



Discipline may include a failing grade for the class together with either suspension or expulsion from the University of Texas. Also, academic misconduct will be reported to the Office of Student Conduct.

The Board of Regents has defined academic dishonesty as follows: “Scholastic dishonesty includes but *is not limited to* cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.” (Regents’ Rules and Regulations, Series 50101, Section 2.2).

All students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

*I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.*

*I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

## **2. LATE WORK POLICY:**

Assignments are graded down 10% of their value per day after the due date.

## **3. MAKE-UP TEST POLICY:**

There are no make-up online quizzes. If emergency circumstances prevents a student from taking either Exam 1 or Exam 2, the student should contact the instructor as soon as possible. A make-up test will be offered only in *exceptional* circumstances, and *no make-up test will be offered in the event that the student also failed to take a previous exam on time*. In the event that the instructor agrees to offer a make-up final exam, the student must agree to the schedule set by the instructor.

## **4. ATTENDANCE POLICY:** Be there on time! Yes – I take attendance.

Attendance *and punctuality* are expected and monitored (see above) if a student is scheduled to use the lab or take an in person exam. Walking in late is rude and distracting – don't do it! If you leave early, I will also note this – unless you clear it with me first.

The Provost's Office would like me to add: “: At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator in student success. Each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients “begin attendance in a course.” UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Canvas. This date is reported to the Department of Education for federal financial aid recipients.”

## **5. ELECTRONIC COMMUNICATION POLICY:**

**I expect you to check your UTA email daily during the week!**

To obtain your NetID or for logon assistance, visit: <https://webapps.uta.edu/oit/selfservice/>.

If you are unable to resolve your issue from the Self-Service website, contact the Helpdesk at [helpdesk@uta.edu](mailto:helpdesk@uta.edu).

## **6. CANVAS POLICY:**

I use Canvas for this course. Check it often for assignments, instructions, announcements, and to monitor your progress.

## **7. CLASSROOM ELECTRONIC DEVICE POLICY:**

During labs, you may use a tablet or laptop to reference digital anatomical sources or to take notes, and you may use your phone to take photos (although generally, this isn't a good use of time). You may not use lab time to check email, facebook, text, etc. This is a waste of the time you paid for.

## **8. AMERICANS WITH DISABILITIES ACT POLICY:**

**Contact me early in the semester if you need special accommodation.**

**All tests taken in the ARC need to be scheduled well in advance.**

Please inform me if you have a disability requiring special consideration for classes and exams, and provide me with the relevant paperwork during the first two weeks of class. If you need to take any tests or exams in the Office for Students with Disabilities (UH 102), please note that these must be scheduled with both the instructor and that office at least a week in advance. It is possible (and preferable) to set up this schedule near the beginning of the semester.

The Office for Students with Disabilities, (OSD) [www.uta.edu/disability](http://www.uta.edu/disability) or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability).

Counseling and Psychological Services (CAPS) [www.uta.edu/caps/](http://www.uta.edu/caps/) or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

## **9. STUDENT FEEDBACK SURVEY**

**Please fill out the feedback survey on Canvas!!**

## **10. EMERGENCY EXIT PROCEDURES:**

**Know your exit routes!** To reach the nearest stairwell, exit the room, turn right, go straight past the elevators, and turn left. Alternatively, there is another stairwell on the east end of the building (exit the room, turn left, continue to the end of the hall, turn right). When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist mobility-impaired individuals.

## **LABORATORY POLICIES (COVID 19 VERSION):**

### **1. PERSONAL PROTECTIVE EQUIPMENT**

Masks, face shields, and gloves are required at all times when in lab. Your mask should be unused if disposable and newly washed if re-usable. A face shield will be provided to you for this class. It will be kept in a sealed, labeled bag in the classroom, and only you will handle it (unless I feel I need to clean it). It will be cleaned with disinfectant after each use.

Although you will wear gloves (and learn to put them on and take them off like a pro), you will also wash your hands immediately prior to coming to class. There is a sink in the classroom at which you can wash your hands during class if needed, but I would like you to use a sink in one of the two restrooms on our floor.

### **2. PERSONAL POSSESSIONS**

- **Phone**
- **Computer *or* tablet**
- **Osteology notebook (see assignments)**
- **Osteology textbook**
- **A writing utensil (no bags)**

No personal possessions other than those listed above may be brought into the laboratory. I will provide a locked room in which you can leave any other items for the duration of the lab. No bags may be brought into the lab. No food or drink may be brought into lab.

### **3. TIME OF LAB USE**

You will be assigned a time for lab work (within the scheduled class time). You will only have that time to use the lab.

### **4. ACTIONS IN LAB**

When you arrive, wash your hands in a nearby restroom, put your possessions in the drop-off room, and come to the lab door. Your mask should be on already. When I admit you, put on your face shield, then your gloves. Go sit at your assigned workstation. Your requested materials should be there already, but let me know if something is missing. During lab, remain at your station. Do not walk around the room.

### **5. HANDLING SPECIMENS**

- Be respectful of all human remains, always. In addition to treating specimens with respect, do not name them.
- Handle all specimens with care and pay attention to how and where you set them on the table.
- All crania must be kept on the cloth donuts provided, unless they are bisected edge down on the table (not in any danger of rolling).
- NEVER put your fingers into the orbits or nasal cavities of a cranium.
- NEVER hold a cranium by the zygomatic arch.
- Always hold crania by their strongest portion – cradle the neurocranium.
- NEVER point at any specimen using a writing utensil. Use the bamboo probes provided.
- NEVER mark any specimen.
- Keep all specimens over the table.
- Even the plastic casts are breakable – be careful with them as well.
- If anything appears damaged, or if you accidentally damage something, bring it to my attention immediately.

## **COURSE SUPPORT SERVICES** (Get Help – Get a better grade!)



### **OFFICE HOURS**

Come see me if you're having trouble with the class. If you can't come to my office hours, email me to make an appointment.

### **TUTORING**

The IDEAS Center (2nd Floor of Central Library) offers free tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817) 272-6593.

### **STUDENT SUPPORT SERVICES AVAILABLE:**

UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom

Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to [resources@uta.edu](mailto:resources@uta.edu), or view the information at <http://www.uta.edu/universitycollege/resources/index.php>.

## **LIBRARY INFORMATION**

Research or General Library Help

Ask for Help

- [Academic Plaza Consultation Services](http://library.uta.edu/academic-plaza) (library.uta.edu/academic-plaza)
- [Ask Us](http://ask.uta.edu/) (ask.uta.edu/)
- [Research Coaches](http://libguides.uta.edu/researchcoach) (http://libguides.uta.edu/researchcoach)

Resources

- [Library Tutorials](http://library.uta.edu/how-to) (library.uta.edu/how-to)
- [Subject and Course Research Guides](http://libguides.uta.edu) (libguides.uta.edu)
- [Librarians by Subject](http://library.uta.edu/subject-librarians) (library.uta.edu/subject-librarians)
- [A to Z List of Library Databases](http://libguides.uta.edu/az.php) (libguides.uta.edu/az.php)
- [Course Reserves](https://uta.summon.serialssolutions.com/#!/course_reserves) (https://uta.summon.serialssolutions.com/#!/course\_reserves)
- [Study Room Reservations](http://openroom.uta.edu/) (openroom.uta.edu/)