PLAN 6346 | ADVANCED DATA ANALYSIS

This course aims to provide:

- An introduction to research design, helping students prepare a research proposal in which statistical techniques to be used.

- Applied statistics, particularly a multitude of topics under regression analysis and multinomial logit models and how to apply these models to examples of social science and urban and regional analysis.

- A brief review of important statistical techniques including understanding of Simultaneous Equation Modeling and Structural Equation Modeling.

Instructor: Prof. Ard Anjomani
Office: **ARCH 418** | Email: **anjomani@uta.edu**
Spring 2017 | Tuesday - 7:00 PM - 9:50 PM

CAPPA College of Architecture, Planning and Public Affairs
The University of Texas at Arlington

PLAN 6346 | **ADVANCED DATA ANALYSIS** | SPRING 2017

Instructor	Ard Anjomani
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Office Hours	Wednesday | 3:00 – 5:00 pm or by Appointment
Section Information	PLAN 6346
Time and Place of Class Meetings	Tuesday | Arch 304 | 7:00 - 9:50 pm

Course Description

The objective of the course is to discuss applied statistics, particularly regression analysis and logit models, and apply these models to examples of social science and urban and regional analysis. The aim is to understand the techniques better through their use, to evaluate critically their use by others, and to learn to appreciate the subtle interplay of "scientific" methods and personal judgment in research and analysis. We will learn to make sense out of data through statistical analysis and to put the data in a format that people can understand. We will emphasize understanding why one method is used over another in different circumstances and the interpretation of the results from the computer. It is my expectation that the student will learn what method to use as well as why it is used, to interpret the inferential statistics and to "tell the story" of the dependent and independent variables.

We begin with introduction to research design, which includes an assignment whereby students prepare a research proposal, hopefully toward student's dissertation, in which regression and/or logit analysis will be used. Students' progress will be discussed every session till the due date of the research proposal. A brief review of statistics as a refresher will begin the statistics part of the course before moving on to linear regression. A multitude of topics under linear regression will be covered in depth, the purpose of which is to expose the student to many of the pitfalls one may encounter in conducting research and to become versed in regression applications and interpretation of results. It should also be noted that a brief review of important related statistical concepts will be discussed when the need arises. After a thorough treatment of bivariate and multivariate regression models we pay special attention to the case of the limited dependent variable. We often try to explain a choice decision or a phenomenon with only information on whether or not an event occurred or whether one of several possible events occurred. We will examine logit (and probit) models as methods to use in such occasions.

Since not everything is explainable by a single equation and that in some research the dependent variable may also play the part of an independent variable, multiple equation systems are often necessary. We will

finally briefly explore Structural Equation Modeling (SEM) and multiple equation systems that include both two-stage least squares and path analysis. These models explore multivariate relationships in an integrated manner.

Learning Outcomes

By the end of this course, students should be able to:

- Understand the process of research design and how to prepare research proposal
- Understand and explain regression analysis and apply them in urban and regional analysis
- Evaluate and choose the appropriate techniques needed in urban and regional research
- Identify and explain bivariate and multivariate regression models
- Identify and explain logit and probit models and apply them in real world projects
- Identify and explain Structural Equation Modeling (SEM) and multiple equation systems.

Required Textbooks and Other Course Materials

There is no required textbook for the course, although the following textbooks are highly recommended. In addition to the useful chapters selected from the textbooks listed below, the instructor will make his presentation notes available to aid in the study and understanding of the readings throughout the semester in the course Blackboard at https://elearn.uta.edu/.

- Berenson, M. L., Levine, D. M., & Krehbiel, T. C. (2012) *Business Statistics: Concepts and Applications* (12th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E., (2014). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

- Mendenhall, W., Beaver, R., & Beaver, B. (2008). *Introduction to Probability and Statistics.* Belmont, CA: Cengage Learning.

- Mendenhall, W. & Sincich, T. (2012). *A Second Course in Statistics - Regression Analysis* (7th ed.), Upper Saddle River, NJ: Prentice Hall.

- Stevens J. P. (2009) *Applied Multivariate Statistics for the Social Sciences*. (5th ed.), New York: Routledge.

- Studenmund, A. H. (2014)*. Using Econometrics: A Practical Guide* (6th ed.), Upper Saddle River, NJ: Prentice Hall.

- Wooldridge, J. M. (2013) Introductory Econometrics: A Modern Approach, (5th ed.), Mason, OH: South-Western.

There are two highly recommended resources in addition to the textbooks mentioned above, which provide students with hands-on experience in statistical analysis using SPSS.

- Hinton, P. R., McMurray, I., & Brownlow, C. (2014). *SPSS Explained*. New York: Routledge.

- Lomax, R. G., & Hahs-Vaughn, D. L. (2012). *Statistical Concepts: A Second Course*. New York: Routledge.

Course Requirements

- To attend the entire class session every week and to participate in class discussions and all activities. In-class activities and discussions are an integral part of our learning together.
- To complete all required readings, assignments, exercises, and examination.
- If you fail to submit your assignments or exercises on time due to an emergency, contact the instructor for the possibility of an extension.

Description of Major Assignments and Examinations

- Attendance and Class Participation

  Apart from the attendance required for every session, active participation and careful reading of the assigned texts and respectful acknowledgement of views that may differ from yours.

- Assignments

  Students are required to complete two course assignments, being designed to help them to put together and test a useful model and interpret the results. The assignment guidelines will be given to students accordingly.

Assignment 1 – Part 1 – Research Design	Due Feb 21
Assignment 1 – Part 2 – Regression Analysis	Due Mar 21
Assignment 2 – Logistic Regression	Due May 02

- Exercises

  During the semester, students are required to complete three course exercises, which have been prepared to help put the knowledge and skills they have acquired into practice.

- Final Examination

  At the end of the semester a final exam is given to students to evaluate the understanding and critical thinking of students to identify and explain the reading materials discussed in the class. At the end of the semester, a prep-exam similar in nature to that of final exam is given to students to help them prepare for the final examination.

Attendance

At The University of Texas at Arlington, taking attendance is not required. Rather, 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. The attendance policy for this course requires regular class attendance from all students (If you must miss a class due to a conflict, please let the instructor know ahead of time). Students are responsible for all course information, content, and assignments that may be missed due to absence. The material is cumulative through the semester and missed material is necessary in subsequent meetings.

Classroom Etiquette

 Please arrive at class on time or before the starting time. Your cell phone devices should be turned off if they cannot be set to a silent mode. Please be prepared for the class discussions. Please try to be pleasant and positive in your classroom behavior. Show respect for all class members. We can learn a great deal from each other, but this can only happen in a comfortable learning environment for everyone in the class. We have people from many different backgrounds in this class and people with many different levels of academic preparation. So please use a respectful and calm tone of voice all the time and avoid sarcasm, heavily judgmental or confrontational comments that will create an inhospitable classroom atmosphere.

Grading

Assignments	Points
• Attendance and Class Participation	10
• Exercises	15
• Assignments	30
• Final Examination	45
Total	**100**

Grade Scale	Description	Points
• A	Excellent	90-100
• B	Good	80-89
• C	Fair	70-79
• D	Passing	60-69
• F	Failure	0-59

Course Calendar

As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. – A. Anjomani

- Week 01 – 01/17/2017   **Introduction to the Course, Expectations and Requirements**
  Instructor's PPT 1 — Introduction to the course

- Week 02 – 01/24/2017   **Introduction Research Design**
  Instructor's PPT 2 — Introduction to Research Design

  Required readings:

  - Blaikie, N. (2010). *Designing Social Research* (2nd ed.). Cambridge: Polity Press – Chapter 1: Preparing Research Design and Chapter 8: Sample Research Designs.

  - Neuman, W. L. (2014). *Social Research Methods: Qualitative and Quantitative Approaches* (7th ed.). Edinburgh Gate: Pearson – Chapter 6: Strategies of Research Design.

  Recommended readings:

  - Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA: Sage Publications – Chapter 1: The Selection of Research Approach.

  - **Assignment 1 – Part 1 – Research Design (Due Feb 21th)**

- Week 03 – 01/31/2017   **Review of Statistics**
  Instructor's PPT 3 — Review of Fundamental Concepts - Part I
  Discussion of Students' Research Design

  Required readings:

  - Mendenhall, W., Beaver, R., & Beaver, B. (2008). *Introduction to Probability and Statistics.* Belmont, CA: Cengage Learning – Introduction & Chapter 1: Describing Data with Graphs.

  - Mendenhall, W. & Sincich, T. (2012). *A Second Course in Statistics - Regression Analysis* (7th ed.), Upper Saddle River, NJ: Prentice Hall – Chapter 1: A Review of Basic Concepts.

- Week 04 – 02/07/2017   **Review of Statistics II**
  Instructor's PPT 4 — Review of Fundamental Concepts - Part II
  Discussion of Students' Research Design Progress

  Required readings:

  - Mendenhall, W., Beaver, R., & Beaver, B. (2008). *Introduction to Probability and Statistics.* Belmont, CA: Cengage Learning – Chapter 2: Describing Data with Numerical Measures.

- **Week 05 – 02/14/2017** **Correlation and Regression**
  Instructor's PPT 5 — Correlation and Regression
  Discussion of Students' Research Design Progress

  Required readings:

  - Mendenhall, W. & Sincich, T. (2012). *A Second Course in Statistics - Regression Analysis* (7th ed.), Upper Saddle River, NJ: Prentice Hall – Chapter 3: Simple Linear Regression.

  Recommended readings:

  - *Hinton*, P. R., McMurray, I., & Brownlow, C. (2014). *SPSS Explained*. New York: Routledge – Chapter 14: Linear Correlation and Regression.

- **Week 06 – 02/21/2017** **Regression Analysis**
  Instructor's PPT 6 — Regression Analysis
  Discussion of Students' Research Design Progress

  Required readings:

  - *Lomax*, R. G., & Hahs-Vaughn, D. L. (2012). *Statistical Concepts: A Second Course*. New York: Routledge – Chapter 7: Simple Linear Regression – Section 7.4: SPSS – Section 7.6: Template and APA-Style Write-Up.

  - **Assignment 1 – Part 2 – Regression Analysis (Due Mar 21th)**

- **Week 07 – 02/28/2017** **Multiple Regression**
  Instructor's PPT 7 — Multiple Regression Models
  Discussion of Students' Research Design Progress

  Required readings:

  - *Hair*, J. F., Black, W. C., Babin, B. J., & Anderson, R. E., (2014). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall – Chapter 3: Multiple Regression Analysis.

  - *Lomax*, R. G., & Hahs-Vaughn, D. L. (2012). *Statistical Concepts: A Second Course*. New York: Routledge – Chapter 8: Multiple Regression – Section 8.7: SPSS – Section 8.9: Template and APA-Style Write-Up.

  Recommended readings:

  - *Hinton*, P. R., McMurray, I., & Brownlow, C. (2014). *SPSS Explained*. New York: Routledge – Chapter 15: Multiple Regression and Multiple Correlation.

- *Anjomani*, A. & Sekio, K. (2006). *Examining Polarization Effects of Globalization - The Case of Large U.S. Metropolitan Areas*, Unpublished.

○ **Week 08 – 03/07/2017**   **Multiple Regression – Further Issues**
Instructor's PPT 8 — Multiple Regression Further Issues

Required readings:

- *Mendenhall*, W. & Sincich, T. (2012). *A Second Course in Statistics - Regression Analysis* (7th ed.), Upper Saddle River, NJ: Prentice Hall – Chapter 7: Some Regression Pitfalls.

- *Wooldridge*, J. M. (2013) *Introductory Econometrics: A Modern Approach*, (5th ed.), Mason, OH: South-Western – Chapter 6: Multiple Regression Analysis: Further Issues.

Application Example: (Presentation time permitting)

- *Anjomani*, A. and Madapaka, P. (2014) Impacts of Transit Oriented Developments (TOD) and Mixed Use Centers (MUC) on Housing Values: a Study in Dallas-fort Worth Metroplex. In J. Trevino, (ed.) *Geography of Three Social Issues: STDs, Energy Consumption, & TOD impacts*, Universidad Autonoma de Nuevo, Monterrey, Mexico.

• **03/14/2017**   **SPRING BREAK**

○ **Week 09 – 03/21/2017**   **Multiple Regression with Dummy Variables**
Instructor's PPT 9 — Dummy Variables and Residual Analysis

Required readings:

- Mendenhall, W. & Sincich, T. (2012). *A Second Course in Statistics - Regression Analysis* (7th ed.), Upper Saddle River, NJ: Prentice Hall – Chapter 8: Residual Analysis.

- Wooldridge, J. M. (2013) *Introductory Econometrics: A Modern Approach*, (5th ed.), Mason, OH: South-Western – Chapter 7: Multiple Regression Analysis with Qualitative Information: Binary (or Dummy) Variables.

Application Example: (Presentation time permitting)

- Anjomani, A. & and Shebeed, O. (2002). *Safety and Efficiency: Regression Results for Left Turn Movements. Unpublished.*

- **Week 10 – 03/28/2017** **Multiple Regression and Model Building**
  Instructor's PPT 10 — Interactions and Model Building

  Required readings:

  - Berenson, M. L., Levine, D. M., & Krehbiel, T. C. (2012) *Business Statistics: Concepts and Applications* (12th ed.). Upper Saddle River, NJ: Pearson Prentice Hall – Chapter 15: Multiple Regression Model Building – Chapter 15: Multiple Regression Model Building.

  - Pardoe, L. (2012) *Applied Regression Modeling* (2nd ed.) John Wiley & Sons – Chapter 4: Regression Model Building I.

- **Week 11 – 04/04/2017** **Logistic Regression**
  Instructor's PPT 11 — Introduction to Logistic Regression and Logit Models

  Required readings:

  - Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E., (2014). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall – Chapter 6: Logistic Regression: Regression with a Binary Dependent Variable – Part I.

  - Studenmund, A. H. (2014). *Using Econometrics: A Practical Guide* (6th ed.), Upper Saddle River, NJ: Prentice Hall – Chapter 12: Dummy Dependent Variable Techniques – Section 2: The Bionomial Logit Model.

  - Wooldridge, J. M. (2013) *Introductory Econometrics: A Modern Approach*, (5th ed.), Mason, OH: South-Western – Chapter 17: Limited Dependent Variables Models and Sample Selection Corrections – Section 17.1: Logit and Probit Models for Binary Response.

  Recommended readings:

  - Hinton, P. R., McMurray, I., & Brownlow, C. (2014). *SPSS Explained*. New York: Routledge – Chapter 14: Linear Correlation and Regression – Logistic Regression.

  - Lomax, R. G., & Hahs-Vaughn, D. L. (2012). *Statistical Concepts: A Second Course*. New York: Routledge – Chapter 9: Logistic Regression – Section 9.8: SPSS – Section 9.10: Template and APA-Style Write-Up.

  Application Example: (Presentation time permitting)

  - Anjomani, A. & and Shebeed, O. (2002). *Safety and Efficiency: Regression Results for Left Turn Movements.* Unpublished.

- **Week 12 – 04/11/2017**   **Logistic Regression**
  Instructor's PPT 12 — Interpretation and Application Logistic Regression

  Required readings:

  - Afifi, A. & Clark, V. (1984). *Computer-Aided Multivariate Analysis*, (3rd Ed.) New York: Chapman & Hall/CRC - Chapter 12: Logistic Regression.

  - Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E., (2014). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall – Chapter 6: Logistic Regression: Regression with a Binary Dependent Variable – Part II.

  Application Example: (Presentation time permitting)

  - Lour, J. & Anjomani, A. (2002) Modal Choice Analysis for Multicenter Cities - The Case of Dallas-Fort Worth Metropolitan Area, *Unpublished*.

  - **Assignment 2 – Logistic Regression (Due May 2nd)**

- **Week 13 – 04/18/2017**   **Logistic Regression**
  Instructor's PPT 13 — Multinomial ad Nested Logit Models

  Required readings:

  - Aldrich, J. H., & Nelson, F. D. (1984). Linear Probability, Logit, and Probit Models (VOl. 45) Thousand OaksSage, CA: Sage – Chapter 3: Estimation of Probit and Logit Models for Dichotomous Dependent Variables.

  - Aldrich, J. H., & Nelson, F. D. (1984). Linear Probability, Logit, and Probit Models (VOl. 45) Thousand OaksSage, CA: Sage – Chapter 4: Minimum Chi-square Estimation and Polytomous Models.

  - Ben-Akiva, M. E., & Lerman, S. R. (1985). *Discrete Choice Analysis: Theory and Application to Travel Demand*. MIT Press – Chapter 10: Models of Multidimensional Choice and the Nested Logit Model.

  - Wrigley, N. (1985) Categorical Data Analysis for Geographers and Environmental Scientists, Caldwell: Blackburn Press – Part 4: Statistical Models for Discrete Choice Analysis.

- **Week 14 – 04/25/2017**   **System of Equations**
  Instructor's PPT 14 — Simultaneous Equations Modeling

  Required readings:

  - Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E., (2014). *Multivariate Data Analysis* (7th ed.). Upper Saddle River, NJ: Pearson Prentice Hall – Chapter 11: Structural Equations Modeling Overview.

  - Stevens J. P. (2009) *Applied Multivariate Statistics for the Social Sciences*. (5th ed.), New York: Routledge – Chapter 16: Structural Equation Modeling.

  - Wooldridge, J. M. (2013) *Introductory Econometrics: A Modern Approach*, (5th ed.), Mason, OH: South-Western – Chapter 16: Simultaneous Equations Models.

  Application Example: (Presentation time permitting)

  - Anjomani, A. (2002). Regional Growth and Interstate Migration. *Socio-Economic Planning Sciences*, 36(4), 239-265.

- **Week 15 – 05/02/2017**   **Course Review and Wrap-up Discussions**
  Prep Exam

- **Week 16 – 05/09/2017**   **Final Exam**

Drop Policy

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://uta.edu/aao/fao/).

Disability Accommodations

UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA), and Section 504 of the Rehabilitation Act. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of **a letter certified** by the Office for Students with Disabilities (OSD). Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities, (OSD) 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.

Counseling and Psychological Services, (CAPS) 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.

Non-Discrimination Policy:

The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.

Title IX Policy

The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. For information regarding Title IX, visit

www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or jmhood@uta.edu.

Academic Integrity

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.*

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System Regents' Rule 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University.

Electronic Communication

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Campus Carry

Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit http://www.uta.edu/news/info/campus-carry/

Student Feedback Survey

At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit http://www.uta.edu/sfs.

Final Review Week

A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures

Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located up the stairs. 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 individuals with disabilities.

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.

The English Writing Center (411LIBR)

The Writing Center Offers free tutoring in 20-, 40-, or 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Our hours are 9 am to 8 pm Mon.-Thurs., 9 am-3 pm Fri. and Noon-6 pm Sat. and Sun. Register and make appointments online at http://uta.mywconline.com. Classroom Visits, workshops, and specialized services for graduate students are also available. Please see www.uta.edu/owl for detailed information on all our programs and services. The Library's 2nd floor Academic Plaza offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library's hours of operation. http://library.uta.edu/academic-plaza.