

## **MATH 4488-110, CRN 80678, APPLICATIONS OF DATA MINING AND VISUALIZATION**

Blended class with face-to-face and online components

Face-to-face meetings on Mondays at 10:00am in HH Room 302K.

Texas A&M University-Central Texas

### **INSTRUCTOR AND CONTACT INFORMATION**

**Instructor: Dr. Mienie Roberts**

**Office: HH 302K**

**Phone: 903.705.9703**

**Email:** Please use the CANVAS inbox for all correspondence related to the course. My university email address is:  
dekokk@tamuct.edu

#### **Office Hours:**

Face-to-face in Room HH 302K:

#### **INSTRUCTOR'S OFFICE HOURS:**

Face-to-face:

Mondays: 12pm-2pm

Online:

Webex:

Mondays: 12pm-2pm, Wednesdays 12pm-2pm

Link to virtual office hours:

<https://tamuct.webex.com/meet/dekokk>

Or by appointment.

#### **GRADUATE ASSISTANT'S OFFICE HOURS:**

Mr. Anthony Moreno

Email:

[am078@my.tamuct.edu](mailto:am078@my.tamuct.edu)

The graduate assistant will be available in person in the MakerSpace on the 3<sup>rd</sup> floor of Heritage Hall, Room 301.

Face-to-face:

Tuesdays, Thursdays: 12:00pm-2:00pm

Online office hours:

Saturday 10:00am – 12:00pm

Sunday

3:00pm – 5:00pm

Link to virtual office hours:

[tamuct-math.my.webex.com/meet/am078](https://tamuct-math.my.webex.com/meet/am078)

#### RESEARCH ASSISTANT'S OFFICE HOURS:

Mr. Sam Jackson

[sj020@my.tamuct.edu](mailto:sj020@my.tamuct.edu)

Face-to-face office hours:

Tuesdays and Thursdays 12:00pm – 1:30pm

#### **Mode of instruction and course access:**

This is a blended course with both online and face-to-face components. The student will be required to complete weekly assignments and present the results on Mondays. The student will also be required to complete the project and submit by the end of the semester.

This course uses the A&M-Central Texas Canvas Learning Management System [<https://tamuct.instructure.com/>]

The course will make extensive use of the software package R/RStudio.

#### **Student-instructor interaction:**

I will check messages once a day on the CANVAS inbox system and reply within 24 hours. Students are expected to check their CANVAS email and announcements on a daily basis.

#### **WARRIOR SHIELD**

Emergency Warning System for Texas A&M University-Central Texas Warrior Shield is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via

email, text message, and social media. All students are automatically enrolled in Warrior Shield

through their myCT email account.

Connect to Warrior Shield by 911Cellular [<https://portal.publicsafetycloud.net/Account/Login>] to change where you receive your alerts or to opt out. By staying enrolled in Warrior Shield, university officials can quickly pass on safety-related information, regardless of your location.

## **COURSE INFORMATION**

### **Course Overview and description:**

This course aims to mine and analyze data obtained from the SE microscope on solar cells.

### **Course Objective:**

The goal of this course is to deepen your conceptual understanding of the underlying mathematics covered in the EC-6 and 4-8 school curriculum. In addition you will engage in the pedagogy pertaining to the learned mathematics by using manipulatives to explain abstract mathematical concepts. The mathematics in the course emphasizes topics relevant to teaching children from prekindergarten to grade 8 according to guidelines as outlined by the Texas Education Agency and the National Council for Teachers of Mathematics.

### **Student learning outcomes:**

### **Required Reading and Textbook(s):**

No text is required for this course. Students are required to sign up for an access code to mymathlab. All homework assignments, test, lecture videos and an online text will be available on mymathlab. Here are the instructions:

## COURSE REQUIREMENTS

The student will be responsible for homework assignments, online discussions, midterm, final exam, and presentations.

### Grading Criteria Rubric and Conversion

Homework	(100 points)
Presentations (10 x 20)	(200 points)
Online Discussions (5 x 20)	(100 points)
Midterm	(300 points)
Final	(300 points)
<b>Total:</b>	<b>1000 Points</b>

### Rubric for presentations:

	Excellent	Average	Poor	Score
Understanding of mathematical concept (10 points)				
Use of technology/ manipulatives (6 points)				
Interaction with class/ audience (4 points)				

**Rubric for online discussions:**

	Excellent	Average	Poor	Score
Understanding of mathematical concept (10 points)				
Grammar (6 points)				
Spelling (4 points)				

**Posting of Grades**

Student will receive instant feedback on progress on mymathlab for the homework assignments and tests (midterm and final exams). The other assignments' grades will also be posted on mymathlab.

**COURSE OUTLINE AND CALENDAR**

**Complete Course Calendar**

**Important University dates:**

## **TECHNOLOGY REQUIREMENTS AND SUPPORT**

### **Technology Requirements**

All students are expected to have access to a laptop/computer with internet access and Excel available to use. All the course materials will be completed online, so it is imperative that the

student has access to CANVAS and MYMATHLAB. Student will be required to use ExamEdge for the labs. Each student will receive login credential for ExamEdge.

This course will use the A&M-Central Texas Instructure Canvas learning management system. Logon to A&M-Central Texas Canvas [<https://tamuct.instructure.com/>].

Username: Your MyCT username (xx123 or everything before the "@" in your MyCT e-mail address)

Password: Your MyCT password

### **Canvas Support**

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select "Chat with Canvas Support," submit a support request through "Report a Problem," or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

### **Other Technology Support**

For log-in problems, students should contact Help Desk Central.

24 hours a day, 7 days a week:

Email: [helpdesk@tamu.edu](mailto:helpdesk@tamu.edu)

Phone: (254) 519-5466

[Web Chat](http://hdc.tamu.edu): [<http://hdc.tamu.edu>]

*Please let the support technician know you are an A&M-Central Texas student.*

The course will also use mymathlab:

Purchase an access code to mymathlab at:

[www.mymathlab.com](http://www.mymathlab.com)

Student will also be required to utilize video conferencing software (skype/webex/google hangouts) for tutoring/office hours.

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## **UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES**

### **Drop Policy.**

If you discover that you need to drop this class, you must complete a [Drop Request Form](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf) [[https://www.tamuct.edu/registrar/docs/Drop\\_Request\\_Form.pdf](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf)].

Professors cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed, signed and returned. Once you return the signed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is

complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

### **Academic Integrity.**

Texas A&M University -Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. Academic misconduct is any act that improperly affects a true and honest evaluation of a student's academic performance and includes, but is not limited to, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student's work, collusion, and the abuse of resource materials. All academic misconduct concerns will be reported to the university's Office of Student Conduct. Ignorance of the university's standards and expectations is never an excuse to act with a lack of integrity. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

### **Academic Accommodations.**

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Office of Access and Inclusion is responsible for ensuring that students with a disability receive equal access to the university's programs, services and activities. If you believe you have a disability requiring reasonable accommodations please contact the Office of Access and Inclusion at (254) 501-5831. Any information you provide is private and confidential and will be treated as such.

For more information please visit our [Access & Inclusion](https://www.tamuct.edu/student-affairs/access-inclusion.html) web page [https://www.tamuct.edu/student-affairs/access-inclusion.html].

### **Important information for Pregnant and/or Parenting Students.**

Texas A&M University-Central Texas supports students who are pregnant and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit the [Student Affairs](https://www.tamuct.edu/student-affairs/index.html) web page [https://www.tamuct.edu/student-affairs/index.html]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines online](http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf), please visit the website [http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

### **Tutoring.**

Tutoring is available to all A&M-Central Texas students, both on-campus and online. Subjects tutored on campus include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors are available at the Tutoring Center in Warrior Hall, Suite 111.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, or have any other question, contact Academic Support Programs at (254) 519-5796, or by emailing Dr. DeEadra Albert-Green at [deeadra.albertgreen@tamuct.edu](mailto:deeadra.albertgreen@tamuct.edu).

Chat live with a tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive FREE online tutoring and writing support. This tool provides tutoring in over 40 subject areas. Access Tutor.com through Canvas.

### **University Writing Center.**

Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University–Central Texas (TAMUCT) is a free workspace open to all TAMUCT students from 10:00 a.m.-5:00 p.m. Monday thru Thursday with satellite hours in the University Library Monday thru Thursday from 6:00-9:00 p.m. This semester, the UWC is also offering online only hours from 12:00-3:00 p.m. on Saturdays.

Students may arrange a one-on-one session with a trained and experienced writing tutor by visiting the UWC during normal operating hours (both half-hour and hour sessions are available) or by making an appointment via [WOnline](https://tamuct.mywconline.com/) at [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at [bruce.bowles@tamuct.edu](mailto:bruce.bowles@tamuct.edu) for any assistance needed with scheduling.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft

Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

If you have any questions about the UWC, please do not hesitate to contact Dr. Bruce Bowles Jr. at [bruce.bowles@tamuct.edu](mailto:bruce.bowles@tamuct.edu).

### **University Library.**

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 85,000 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place on Skype or in-person at the library. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our [Library website](http://tamuct.libguides.com/index) [http://tamuct.libguides.com/index].

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### **OPTIONAL POLICY STATEMENTS:**

#### **A Note about Sexual Violence at A&M-Central Texas**

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Counseling (254-501-5955) located on the second floor of Warrior Hall (207L).

Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors we will

support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the [Title IX webpage](https://www.tamuct.edu/departments/compliance/titleix.php) [https://www.tamuct.edu/departments/compliance/titleix.php].

## **INSTRUCTOR POLICIES.**

The deadlines are clearly outlined in the weekly schedule. Please complete assignments on time. No extensions will be granted.

### **Copyright Notice.**

Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas' Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

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