



UNCO 1301.01E (21704) – VOTING & APPORTIONMENT

MEETING DAYS: MONDAY-WEDNESDAY-FRIDAY

MEETING TIME: 10:00A.M.-10:50A.M.

CLASSROOM PLACE: MWF BA 221

(BREAKOUT ROOM (FOR FRIDAYS ONLY): BA 346)

COURSE SYLLABUS: SPRING 2020

Instructor: Dr. Mehmet Celik

Office Location: Binnion 323 (Please, see the map at the end of the syllabus)

Office Hours: Mon. 11am-12:00pm; Tues. 11am-1:00pm; Wed. 11am-1:00pm; Thur. 11am-12pm or by appointment

Office Phone: 903-886-5944

Office Fax: 903-886-5945

University Email Address: Mehmet.Celik@tamuc.edu

Preferred Form of Communication: email

Communication Response Time: within 24 hours during week days (M-F)

COURSE INFORMATION

Materials

Textbook(s):

- *Radioactive: Marie & Pierre Curie: A Tale of Love and Fallout* by Lauren Redniss – This is the common read supplied by the freshman year experience
- *Math in Society* – by David Lippman – This is a free, open textbook.
<http://www.opentextbookstore.com/mathinsociety/>
- *A Survey of Mathematics with Applications* (9th Edition, or an older edition) by Allen R. Angel, Christine D. Abbott, and Dennis C. Runde
- The instructor will be posting lecture notes on D2L during the course.

Course Description: A Signature Course at Texas A&M University- Commerce offers first-year students the opportunity to explore unique topics in engaging learning environments. Students develop college-level skills in communication, critical thinking, and social responsibility through a rigorous intellectual experience. Can one person's vote make a difference? How are voting decisions made? How does the study of mathematics inform our understanding of everyday decisions like purchasing a home, saving for college, investing in retirement, and purchasing car insurance? This course aims to develop students' natural ability to know something without requiring any proof of evidence.

Student Learning Outcomes

1. Students will be able to analyze, evaluate, or solve problems when given a set of circumstances, data, texts, or art.
2. In written, oral, and/or visual communication, students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure.
3. Students will demonstrate an understanding of societal and/or civic issues.

Core Objectives: This course addresses the core objectives of critical thinking, communication, and empirical and quantitative skills.

Core Objective 1: Critical Thinking

Students will be able to analyze, evaluate, or solve problems when given a set of circumstances, data, texts, or art.

Core Objective 2: Communication Skills

In written, oral, and/or visual communication, A&M-Commerce students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure.

Core Objective 3: Empirical and Quantitative Skills

Students will be able to interpret, test and demonstrate principles revealed in empirical data and/or observable facts.

Student Assessment Outcomes

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

1. *Critical Thinking:* Will be measured through one or more of the following: quizzes, projects, and/or exams
2. *Oral, Visual, and Written communication Skills:* Will be measured through one or more of the following: quizzes, projects, and/or exams
3. *Empirical and Quantitative Skills:* Will be measured through one or more of the following: quizzes, projects, and/or exams

Methods of Instruction: Course will be delivered face-to-face three days a week. There will be standard lectures on Mondays and Wednesdays. On Fridays,

students will participate in discussion sessions about the concept taught during the week. The discussion sessions will be facilitated by Student Instructors who have been specifically selected to assist with this course. The class will be divided into smaller groups for discussions on Fridays.

Additionally, there will be course activities that require student interaction with other students during class as well as events at the university. Each student will also engage in the Lionizing event that requires a presentation or demonstration of some aspect of learning relevant to the course. More detail about these opportunities will be provided throughout the course.

COURSE REQUIREMENTS

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Exams – (in class) there will be two Mid-term exams. You will have a full class period (50 minutes) to complete each.

Exam 1: *Wednesday February 26th*

Exam 2: *Wednesday April 8th*

Make-up exams are possible only if there is a documented emergency.

Final Exam - (in class) Comprehensive Final Exam

Final Exam: *Monday, May 4th, starts at 10:30am*

In-class Quizzes – There will be no make-ups for any missed in-class quizzes. Instead, at the end of the semester only the highest 10 in-class quizzes will be considered.

Attendance: Class attendance will be taken daily. The attendance is worth of 30pts. Class attendance and participation is expected because the class is designed as a shared learning experience and because essential information neither in the lecture notes nor in textbook will be discussed in class. Attendance and participation in all class meetings is essential to the integration of course material and your ability to demonstrate proficiency. Students are responsible to notify the Student Assistants (SIs) if they are missing class and for what reason. Students are also responsible to make up any work covered in class. It is recommended that each student coordinate with a student colleague to obtain a copy of the class notes, if they are absent.

Meeting with the professor (worth 15 pts): You need to meet with the professor two times in his office (his office Binnion 323) during the first four weeks of the semester. During these meetings your experience in the class and in college and the semester project will be discussed.

Meetings with a Student Assistant (worth 15 pts): During the course, you are assigned to a student assistant and must meet with that assistant for at least three times during the first 5 weeks of the semester. The meetings place and time with the student assistants will be announced/posted during the first

week of classes. These meetings are for discussing the course and the university experience.

Extra Credit: The Mathematics Department will offer three math club activities during the spring 2020 semester. You will receive 4 points of extra credit toward your lowest in-class quiz for each math club activity you attend. You need to watch for announcement emails (for Math Club activities exact dates and place) in your email account. You will also be informed during class meetings. *There is no make-up for extra credit.*

Homework: There will be a suggested problem set assigned for each week. The answers to the suggested problems will be provided at the back of each set. These suggested problems will not be collected. However, you will see some of these problems (verbatim or with slight variations) on tests and in-class quizzes, so practicing solving the problems is strongly encouraged!

Course Project: Each student will work and complete a project during the semester. The project questions will be provided (it will be posted onto D2L) during the semester. Doing a mathematical project not only will it enable you to test your understanding of the material you saw in class - you will understand mathematics through trying, failing, and eventually succeeding in solving a math problem. When you work on your project, first try to do it by yourself. After that, you may discuss it with others. You will learn from talking about mathematics. However, do not copy any solutions from any internet sources or from others. You are supposed to understand the problem (either through own research or discussion) and then formulate the solution in your own words. Discussing a project with classmates (or your teaching assistants and professor), understanding it, and then formulating it in your own words are allowed. **The due date for all projects submission is Monday, April 6th, 2020.** The project is worth of 50 points. Part of the Project requirement is to present your work to the entire University Community at the Lionizing Case Assignment event is on **Friday May 1st, at 10am, place to be determined.**

Lionizing Case Assignment/Presentation: The Lionizing is a culminating event required of all sections of UNCO 1301. At this public event, students will present their work to the entire University Community. The instructor will determine the format of these presentations. Suggestions include poster presentations, short talks, installations, oral presentations and/or proposals, et cetera. Students will be present at the Lionizing to take questions about their work. At The Lionizing a team of assessors will circulate the event with a rubric that will evaluate how well your project:

- Demonstrates critical thinking
- Demonstrates your understanding of your social responsibility
- Demonstrates your excellent written and oral communication skills

This assessment will not influence your grade; instead, it helps the University College assess how well our Signature Courses are helping students meet important outcomes. **The spring 2020 Lionizing Case Assignment/Presentation is on Friday May 1st, at 10am, place to be determined.**

The key to success in this course is regularly working with other students in the class, doing the weekly suggested homework problems and asking questions when you have them!!! Interact with your professor and Teaching Assistants during class meetings and outside of the class. Homework problems may be discussed in class, but there will often not be enough time to discuss all of them. Please come to office hours or visit the Student Instructors math tutoring hours at the library if you have additional questions about the homework and/or the semester project. Please, see the attached map for my office and for the Math Skills Center locations at the end of this syllabus.

GRADING

Grading Matrix: This class will be graded on a total points system. 400 points are possible in the class. The following grading matrix presents how your total score is going to be calculated at the end of the semester of spring 2020 for UNCO 1301.01E course. All the grading instruments are assigned between the first day of class and last day of class of spring 2020 semester. The Final exam is the last grading instrument of the course; the date of the Final Exam is: [Monday, May 4th, starts at 10:30am](#). The grade is completely objective and is determined solely by student performance on each of the evaluation criteria (Mid-term exams, in-class quizzes, a semester project, and the final exam).

Instrument	Value (points)	Total
Attendance		30
In-class Quizzes	The best 10 in-class quizzes (the best 10 scores)	70
Meetings with the Professor and Student Assistants		30
Course Project		50
Mid-term Exams	2 Mid-term exams at 70 points each	140
Final Exam	One comprehensive final exam at 80 points	80
Total:		400

Grade Determination:

A = 400 – 360 pts; i.e. 90% or better

B = 320 – 359 pts; i.e. 80 – 89 %

C = 280 – 319 pts; i.e. 70 – 79 %

D = 240 – 279 pts; i.e. 60 – 69 %

F = 239 pts or below; i.e. less than 60%

TECHNOLOGY REQUIREMENTS

The graphing calculator of TI 83/TI 84 or equivalent is highly recommended. Calculators other than Texas Instruments calculators may be used, but classroom instruction on calculators will be provided for TI equipment only. The Mathematics Department has set up a calculator loan program to support students. **Students can borrow a calculator for a semester** with a fee (\$10 to \$15 for TI - 83/84). It is first come, first served basis.

Note: Calculators that solve problems for students, including but not limited to TI-Inspire, TI-89 or higher, Casio Prizm, Casio Touch or higher are NOT allowed to be used for this class.

Students will be expected to have internet access and software compatible with the university learning management system. Students will need MS Office to compose written assignments and Adobe Acrobat Reader to access handouts/required readings available via D2L.

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

<https://documentation.brightspace.com/EN/brightspace/requirements/all/browser-support.htm>

YouSeeU Virtual Classroom Requirements:

<https://support.youseeu.com/hc/en-us/articles/115007031107-Basic-System-Requirements>

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

INTERACTION WITH INSTRUCTOR STATEMENT

An D2L website has been created for the course which may be accessed from student myLEO accounts following the D2L app under apps. All files and documents that the instructor shares with the class will be posted on the the course website. You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000.

My primary form of communication with the class will be through Texas A&M University – Commerce email and Announcements on D2L. Any changes to the syllabus or other important information critical to the class will be disseminated to students in this way via your university email address available to me through MyLeo and in Announcements. It will be your responsibility to check your email and Announcements regularly.

Tutoring services up to the level of Calculus I is provided by the Math Skill Center (Binnion Room 328) with the following hours: Monday and Wednesday, 8am – 8pm; Tuesday and Thursday, 8am – 6pm; Friday, 8am – noon.

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures

Academic Honesty

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including (but not limited to) receiving a failing grade on the assignment, the possibility of failure in the course and dismissal from the University. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced. In ALL instances, incidents of academic dishonesty will be reported to the Department Head. Please be aware that academic dishonesty includes (but is not limited to) cheating, plagiarism, and collusion.

Cheating is defined as:

- Copying another's test or assignment

- Communication with another during an exam or assignment (i.e. written, oral or otherwise)
- Giving or seeking aid from another when not permitted by the instructor
- Possessing or using unauthorized materials during the test
- Buying, using, stealing, transporting, or soliciting a test, draft of a test, or answer key

Plagiarism is defined as:

- Using someone else's work in your assignment without appropriate acknowledgement
- Making slight variations in the language and then failing to give credit to the source

Collusion is defined as:

- Collaborating with another, without authorization, when preparing an assignment

If you have any questions regarding academic dishonesty, ask. Otherwise, I will assume that you have full knowledge of the academic dishonesty policy and agree to the conditions as set forth in this syllabus.

Late/Make-up Policy: Make-up exams are possible only if there is a documented emergency. There will be no make-ups for any missed in-class quizzes. Instead, at the end of the semester only the highest ten in-class quizzes will be considered. Late work on online homework will not be accepted without a documentable and valid excuse. Examples of documentable and valid excuses include:

- *car accident w/ police report
- *illness w/ doctor's note (you or your child)
- *athletic or other mandatory extra-curricular travel
- *field trip for another class
- *being detained upon entering the country by Homeland Security

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx).
<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum:

<https://www.britannica.com/topic/netiquette>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](#) webpage and [Procedure 13.99.99.R0.01](#).

<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

Copyright Policy:

The handouts used in this course are copyrighted. By "handouts," I mean all materials generated for this course, which include but are not limited to syllabi, lecture notes, quizzes, exams, in-class materials, review sheets, projects, and problems sets. Because these materials are copyrighted, you do not have the right to copy and distribute the handouts.

STUDENTS WITH DISABILITIES-- ADA STATEMENT

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gee Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](#)

<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

CAMPUS CONCEALED CARRY STATEMENT

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

COURSE OUTLINE / CALENDAR

WEEKLY SCHEDULE:

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated by email and in-class announcements.

Week of	Monday	Wednesday	Friday	Topics
Jan.13			<i>Discussion</i>	Introduction, Course Syllabus, Mathematics of Voting Voting Approaches
Jan.20	Martin Luther King, Jr. Day (university closed)		<i>In-class Quiz & Discussion</i>	Voting Approaches (continued)

Jan.27			<i>In-class Quiz & Discussion</i>	Fairness Criteria (Weaknesses & Strengths of the Voting Approaches); Arrow's paradox
Feb. 03			<i>In-class Quiz & Discussion</i>	Apportionment Approaches
Feb. 10			<i>In-class Quiz & Discussion</i>	Weaknesses & Strengths of the Apportionment Approaches (Paradoxes)
Feb. 17		<i>In-Class Quiz</i>	<i>In-class Quiz & Discussion</i>	The Konigsberg Bridge Problem; Approaches for solving the Konigsberg bridge and applications of these approaches to our everyday life problems
Feb. 24	<i>Practice Review for Exam #1</i>	Exam #1	<i>In-class Quiz & Discussion</i>	Practice Review, Exam #2, and The Traveling Salesman Problem
March 02			<i>In-class Quiz & Discussion</i>	The Traveling Salesman Problem, Approaches for solving the Traveling Salesman Problem and applications of these approaches to everyday life problems
March 09	SPRING BREAK			
March 16			<i>In-class Quiz & Discussion</i>	Using minimum cost spanning trees to represent problems from everyday life and approaches to solve them
March 23			<i>In-class Quiz & Discussion</i>	Sampling and Recognizing Deceptive Practices with Numbers in everyday life
March 30			<i>In-class Quiz & Discussion</i>	Method to Organize and Summarize Quantitative Data from everyday life
Apr. 06	<i>Practice Review for Exam #2</i>	Exam #2	<i>In-class Quiz & Discussion</i>	Practice Review, Exam #2, and The Different Meanings of "Average" and their misuses in daily life.
Apr. 13			<i>In-class Quiz & Discussion</i>	Describing the position of a piece of data in relation to the rest of the data; Understanding the "Bell curve"; Its applications to everyday life problems;
Apr. 20			<i>In-class Quiz & Discussion</i>	Math for Consumer, "Money makes money and the money that money

				makes more money.”(Benjamin Franklin)
Apr. 27			<i>Lionizing Case Assignment/Presentation Friday, at 10am</i>	Understanding the Cost of Borrowing Money <i>Lionizing Case Assignment/Presentation May 1st, Friday at 10am</i>
May 4				FINAL EXAM DATE AND TIME: Monday, May 04, 2020 between 10:30 AM - 12:30 PM

Below are the maps to my office building, to my office room, and to Math Skill Center.

Figure 1: The road from the classroom building Journalism Building to my office building BINNION.

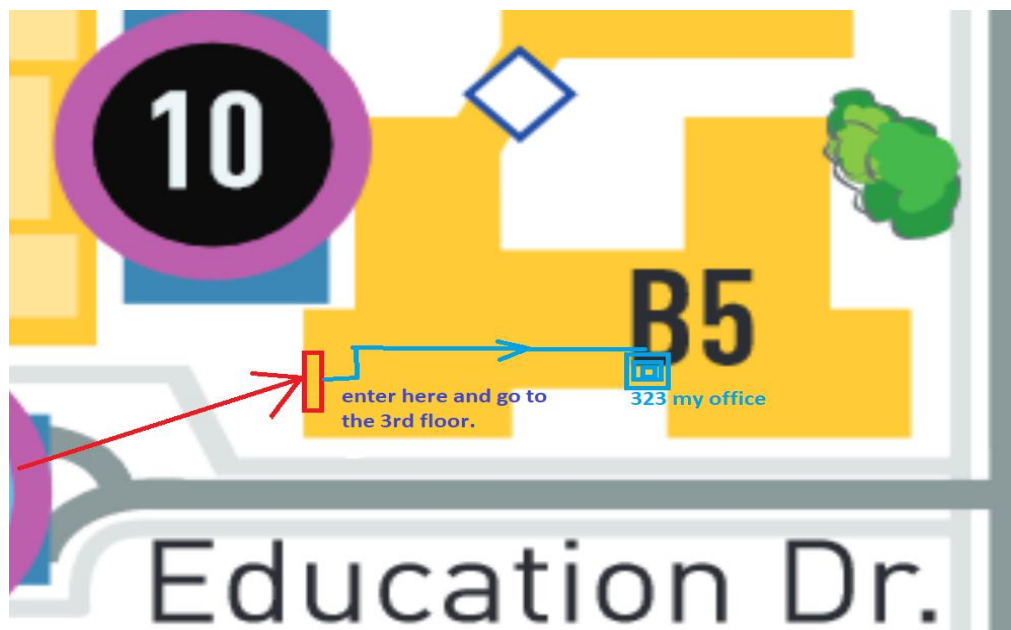


Figure 2: My office is on the third floor of Binnion, room #323.

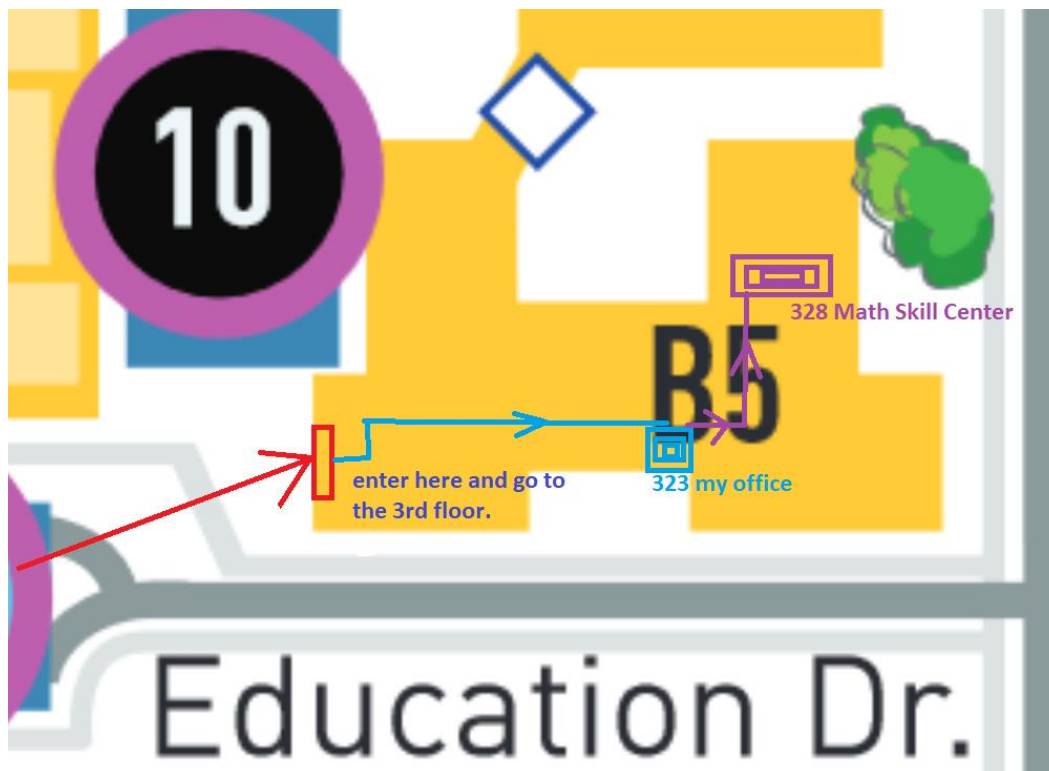


Figure 3: Math Skill Center (Binnion Room 328) with the following hours: Monday and Wednesday, 8am – 8pm; Tuesday and Thursday, 8am – 6pm; Friday, 8am – noon.