



# MAYS BUSINESS SCHOOL

TEXAS A & M UNIVERSITY

## ISTM601 – FUNDAMENTALS OF BUSINESS PROGRAMMING

Summer 2019  
MTWRF; Time TBA  
Location TBA

**Instructor:** TBA  
**Office:** TBA  
**Phone:** TBA  
**E-Mail:** TBA  
**Office Hours:** TBA

### COURSE OVERVIEW

This course will focus on the design, development, and testing of business applications using C#.

### COURSE LEARNING OUTCOMES

At the completion of the course, successful students should be able to:

1. Gain mastery of basic programming concepts (e.g., sequence, decision structures, iteration, event handling, and structured exception handling)
2. Gain an understanding of object-oriented programming principles (e.g., classes, objects, methods, inheritance)
3. Develop proficiency with various debugging techniques (e.g., setting a variable watch, step-through, step-over, breakpoints)
4. Develop proficiency with and gain an appreciation of the value of testing techniques (e.g., desk checking and input validation)
5. Practice and recognize the value of good internal documentation
6. Design and develop accessible and user-friendly applications that directly address business needs

### CATALOG DESCRIPTION

Development of structured and object-oriented program logic and design in solving business programming problems using C#; emphasis on enforcing good techniques and logical thinking.

### COURSE MATERIALS

Murach's C# 2015 by Joel Murach & Anne Boehm.

**Additional Requirement:** Access to Microsoft Visual Studio 2015 for use in completion of homework assignments. This software is available on all Open Access Computer Lab workstations and on all computer workstations in Wehner 184.

**You MUST have either a flash drive or access to an alternative network storage location for lab exercises.**

## GRADING AND COURSE REQUIREMENTS

The course requirements and evaluation of each student's work in the course are based upon performance in several areas. Grade contributions and letter grade determination are shown below.

| Percent  | Grade |
|----------|-------|
| 90 - 100 | A     |
| 80 - 89  | B     |
| 70 - 79  | C     |
| 60 - 69  | D     |
| 0 - 59   | F     |

|                    |             |
|--------------------|-------------|
| Homework           | 30%         |
| Projects           | 30%         |
| Conceptual Exam 1* | 10%         |
| Coding Exam 1*     | 10%         |
| Conceptual Exam 2* | 10%         |
| Coding Exam 2*     | 10%         |
| <b>Total</b>       | <b>100%</b> |

\* If a student's score across the exams is less than C quality work (<70%), the highest grade the student may earn for the course is a "D." This rule applies regardless of the student's performance in other areas of the course. If a student's exam total score is less than 70%, the student will earn a final grade of "D" or "F" based on the student's total exam score.

**Homework:** Homework assignments are individual work assignments. Assignments must be submitted at the beginning of class on the day they are due. Do not miss class to finish an assignment – it is late after class starts. **There is a 50% penalty per day** assessed against late assignments that are unexcused.

**Projects:** programming projects will be group-based (2-4 students per group). The projects will be more extensive than homework assignments, and graded accordingly.

### In-Class Exercises

Throughout the semester you will participate in in-class exercises during class. The purpose of these exercises is to give you the opportunity to interact with your instructor and fellow students while you work problems in class. The exercises are scheduled on an ad hoc basis and deal with topics that were just discussed in class. These exercises will not be graded.

### Examinations

Exams will consist of a practical exam which will be administered in the lab, as well as an online conceptual exam that will be offered outside of the classroom. Exam schedule will be posted on eCampus.

The university views class attendance as an individual student responsibility. Students are expected to attend class and to complete all assignments. Under Student Rule 7, an excused absence is defined as follows:

The reasons absences are considered excused by the university are listed below. See Student Rule 7 for details (<http://studentrules.tamu.edu/rule07>). The fact that these are university-excused absences does not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.

- 1) Participation in an activity that is required for a class and appears on the university authorized activity list at <https://studentactivities.tamu.edu/app/sponsauth/index>
- 2) Death or major illness in a student's immediate family.
- 3) Illness of a dependent family member.
- 4) Participation in legal proceedings or administrative procedures that require a student's presence.
- 5) Religious holy day. NOTE: Prior notification is NOT required.
- 6) Injury or illness that is too severe or contagious for the student to attend class.
  - a) Injury or illness of three or more class days: Student will provide a medical confirmation note from his or her medical provider within one week of the last date of the absence (see Student Rules 7.1.6.1)
  - b) Injury or illness of less than three class days: Student will provide one or both of these (at instructor's discretion), within one week of the last date of the absence:
    - (i.) Texas A&M University Explanatory Statement for Absence from Class form available at <http://attendance.tamu.edu> or
    - (ii.) Confirmation of visit to a health care professional affirming date and time of visit.
- 7) Required participation in military duties.
- 8) Mandatory admission interviews for professional or graduate school that cannot be rescheduled.
- 9) Mandatory participation as a student-athlete in NCAA-sanctioned competition.
- 10) In accordance with Title IX of the Educational Amendments of 1972, Texas A&M University shall treat pregnancy (childbirth, false pregnancy, termination of pregnancy and recovery therefrom) and related conditions as a justification for an excused absence for so long a period of time as deemed medically necessary by the student's physician. Requests for excused absence related to pregnancy should be directed to the instructor.

**Students are expected to attend all classes regularly and punctually. For late arrivals and absences, it is the *student's responsibility* to obtain information from missed classes from other students (this includes changes to due dates and contents of exams, assignments, labs, and projects). A late arrival to the class is counted as an absence.**

***Students with absences will begin losing "participation points."***

***Students having more than 3 absences will drop one letter grade.***

***Students having more than 6 absences will drop two letter grades.***

## **MAKE-UP WORK POLICY**

Students with excused absences will receive adequate time and opportunities to submit the required deliverables that are delayed due to those absences. To submit work under the "make-up" policy requires documentation as specified in the TAMU student rules (see Student Rules: Rule 7 – <http://student-rules.tamu.edu>).

Students with unexcused absences will receive no credit for missed deliverables.

## LATE WORK POLICY

Any course deliverable turned in late will be discounted by 50% per day. "Late" means submitting deliverable any time after the assignment deadline has passed. Deliverables submitted more than 72 hours late will not be graded.

**Exception:** Students with excused absences will receive adequate time and opportunities to submit work they missed due to absence. Students must provide documentation and notice to the instructor as specified in TAMU student rules. (Student Rules: Rule 7 -- <http://student-rules.tamu.edu>).

## Students with Disabilities

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 believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit <http://disability.tamu.edu>.

## AGGIE HONOR CODE

*"An Aggie does not lie, cheat, or steal or tolerate those who do."*

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Ignorance of the rules does not exclude any member of the TAMU community from the requirements or the processes of the Honor System. You can learn more about the Honor Council Rules and Procedures as well as your rights and responsibilities at the following URL:

<http://aggiehonor.tamu.edu>

For each assignment or project that is submitted for grading in this course, students must affirm their commitment to the Aggie Honor Code with the following statement.

*"On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work."*

Even if you do not explicitly state the above, by submitting any course deliverable, you affirm your adherence to the Aggie Honor Statement for that deliverable.

"Texas A&M University students are responsible for authenticating all work submitted to an instructor. If asked, students must be able to produce proof that the item submitted is indeed the work of that student. Students must keep appropriate records at all times. The inability to authenticate one's work, should the instructor request it, is sufficient grounds to initiate an academic dishonesty case."

(<http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx>)

I will follow the steps and processes outlined in the Honor Council Rules and Procedures in all cases of academic misconduct in this class (see <http://aggiehonor.tamu.edu/RulesAndProcedures>).

## STATEMENT ON PLAGIARISM

As commonly defined, plagiarism consists of passing off as one's own, ideas, words, writing, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If

you have any questions regarding plagiarism, please review additional information provided under Student Rule 20 and Aggie Honor System Rules under “Plagiarism” (see Student Rule 20 <http://student-rules.tamu.edu> and Aggie Honor System Rules <http://aggiehonor.tamu.edu/RulesAndProcedures/HonorSystemRules.aspx>).

### FOOD AND DRINK IN THE CLASSROOM

We have beautiful, state-of-the-art classrooms in the Wehner Building. We want to maintain the high quality of these classrooms for current and future students. Thus, it is necessary for you to adhere to the established policy of no beverages (except water), food, tobacco products, or like items within the Wehner Building classrooms.

### COURSE SCHEDULE

| Date   | Topics                            | Chapters | Assignments      |
|--------|-----------------------------------|----------|------------------|
| Week 1 | Introduction/Syllabus, IDE        | 1        |                  |
| Week 1 | Properties, Methods, Events       | 2        |                  |
| Week 1 | Event Handling, Coding, Debugging | 3        |                  |
| Week 1 | Event Handling, Coding, Debugging | 3        | hw1              |
| Week 1 | Numeric Data                      | 4        |                  |
| Week 2 | String Data                       | 4        | hw2              |
| Week 2 | If/Else, Switch Statements        | 5        |                  |
| Week 2 | Loops                             | 5        | hw3              |
| Week 2 | <b>Exam 1</b>                     |          |                  |
| Week 2 | Methods & Event Handlers          | 6        |                  |
| Week 3 | Methods & Event Handlers          | 6        | hw4              |
| Week 3 | Data Validation                   | 7        |                  |
| Week 3 | Data Validation                   | 7        | hw5              |
| Week 3 | Arrays & Collections              | 8        |                  |
| Week 3 | Arrays & Collections              | 8        | hw6              |
| Week 4 | Dates & Strings                   | 9        |                  |
| Week 4 | <b>Exam 2</b>                     |          | hw7              |
| Week 4 | Common Form Controls              | 10       |                  |
| Week 4 | Multiple Forms                    | 10       | hw8              |
| Week 4 | Create & Use Classes              | 12       |                  |
| Week 5 | Create & Use Classes              | 12       | <b>Project 1</b> |
| Week 5 | Create & Use Classes              | 12       | hw9              |
| Week 5 | Final Projects                    |          | <b>Project 2</b> |
| Week 5 | Final Projects                    |          | <b>Project 3</b> |