Computer Science 340 - Application Software for Microcomputers

CSC 340.001   STEM Building, Room 318   12:30-1:45 TR   Spring 2020

Instructor Information: Bill Long   STEM Building, Room 312M   (936) 468-1765   wlong@sfasu.edu

Office Hours: (subject to change)
MW 11:00-11:30; 1:30-2:00   TR 11:00-11:30; 2:00-2:30   Or By Appointment.

Optional Materials:

Course Description: Application Software for Microcomputers - Advanced utilization of spreadsheet software. Utilization of database software. Operating systems and disk management skills. May not be used to satisfy computer science requirements for a computer science or computer information systems major or a computer science minor. Prerequisites: CSC 100 or 101 or 121 or nine hours of CSC or MGT 272.

Student Learning Outcomes:
Upon successful completion of the course, students should be able to:
1. Demonstrate introductory microcomputer operating system skills.
2. Design and develop advanced electronic spreadsheets.
3. Design and develop relational database projects.
4. Demonstrate strategies which can be used to learn new and/or different computer applications.

Course Calendar/Timeline:

<table>
<thead>
<tr>
<th>General Topic</th>
<th>Approximate % of course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating System and Application Development</td>
<td>4</td>
</tr>
<tr>
<td>Spreadsheets</td>
<td>62</td>
</tr>
<tr>
<td>Data Base Management Systems</td>
<td>27</td>
</tr>
<tr>
<td>Exams (plus final)</td>
<td>7</td>
</tr>
</tbody>
</table>

http://www.sfasu.edu/academics/colleges/sciences-math/computer-science/about/faculty-resources

Grading Policy:

Exams: (80% of the course grade).
Test 1 (20%) - Intermediate Microsoft Excel, file management, general Windows/PC knowledge
Test 2 (25%) - Advanced Microsoft Excel; will include topics from TEST 1
Final (35%) - Comprehensive including new material from Microsoft Access

All exams will include information from previous tests. There are no exemptions for the final examination. Check the final exam time. If the final exam time is a problem then you need to drop this course.

Assignments: (20% of the course grade)
8 – 12 Excel workbook assignments, each considered a separate grading unit (20 points per unit)
2 – 4 Access database projects, each containing one or more grading units (20 points per unit)
20 – 30 quizzes, each considered a separate grading unit (points per unit vary)
Extra-credit assignments may be given, each considered a separate grading unit (points per unit vary)
At the instructor’s discretion, some assignments may not be graded, in whole or in part
Note: you may be given assignments during the last five days of the semester (dead week).

Per SFA Policy 5.4, there is: an amount of student work per credit hour that reasonably approximates not less than one hour of class or direct faculty instruction and two hours of out-of-class student work per week for fifteen weeks over a long semester, or the equivalent amount of work over a different amount of time.
Department of Computer Science
Class Information and Policies

Department Information:
STEM Building, Suite 312  (936) 468-2508  P.O. Box 13063, Nacogdoches, TX  75962

Attendance: Seating assignments may be made and roll may be taken regularly. Attendance may be used in calculating your final grade. If you come to class, you are expected to be present the entire class period unless you have been given permission to leave early. If you are absent from class, DO NOT ask me to repeat the class lecture. Do not bring food or drinks into the classroom. If you wear large hats, sit on the back row. Keep your feet off of the seat backs. Only students officially registered for the course and approved assistants may attend class.

Examination Policy: All class examinations are considered to be a major part of the course work upon which a large part of the course grade depends. Class examinations will be announced at least two classes prior to the examination. If you have a conflict with another university event, you must contact me well in advance of the examination. In case of an extreme emergency, contact me before the scheduled examination. Failure to do so may result in an examination grade of zero. Make-up exams tend to be much harder than the original! A grade of zero will be assigned for any missed unannounced quizzes.

Assignment Policy: Printed assignments are due at the BEGINNING of class (or by an announced time) on the specified due date. Printed assignments that are submitted outside of class before the specified due date must be given to the Department of Computer Science secretarial staff. Electronically submitted assignments are due at 3:07 AM (or by an announced time) on the specified due date. Any assignment submitted to me after I have collected the assignments from the class is considered to be late. As much as 100% of the total credit may be deducted from assignments that are handed in late. You must keep all of your graded homework and any backup copies of assignments until the final grades have been assigned. PLEASE NOTE: You may be given assignments and cover new material during the last five class days of the semester.


Computer Account Policy: All assignments that require the use of the University Computer must be done under the computer account that is assigned to you in this class. You should NOT do other class assignments in this account, and you should NOT do assignments from this class in other accounts.

Software Policy: Disciplinary action will be taken against individuals who perform unauthorized duplication of computer software or who are involved in the unauthorized use of duplicated software.

Cheating Policy: If in my judgement a student is found cheating on an examination, a grade of zero will be assigned as the examination grade and a minimum of one (1) letter grade will be lost in the course grade. A course grade of F may be assigned depending on the situation. A student found cheating on an examination may not drop the course.

All other class assignments are to be done INDEPENDENTLY. If in my judgement two or more people hand in assignments that I judge to be the same, a grade of zero will be awarded to all involved assignments and a minimum of one letter grade may be lost in the course grade. A recurrence of this by any individual will result in a grade of F in the course. Students should save all developmental copies of their assignments so that individual development can be verified to me if I think it is necessary. DO YOUR OWN WORK!!!!!!

Computing Laboratory Usage: Students who utilize equipment in university computing laboratories are expected to read and abide by all posted policies for the laboratories.

Identification: A valid student I.D. card AND driver license must be presented on each examination day. (No I.D...No exam...Grade of zero)
College Information:
STEM Building, Suite 406    (936) 468-2805    P.O. Box 13034, Nacogdoches, TX 75962-3034

Program Learning Outcomes
Program learning outcomes define the knowledge, skills, and abilities students are expected to demonstrate upon completion of an academic program. These learning outcomes are regularly assessed to determine student learning and to evaluate overall program effectiveness. You may access the program learning outcomes for your major and particular courses at http://www.sfasu.edu/academics/colleges/sciences-math/computer-science/about/accreditations

General Student Policies

Academic Integrity (A-9.1)
Academic integrity is a responsibility of all university faculty and students. Faculty members promote academic integrity in multiple ways including instruction on the components of academic honesty, as well as abiding by university policy on penalties for cheating and plagiarism.

Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes but is not limited to (1) using or attempting to use unauthorized materials to aid in achieving a better grade on a component of a class; (2) the falsification or invention of any information, including citations, on an assigned exercise; and/or (3) helping or attempting to help another in an act of cheating or plagiarism. Plagiarism is presenting the words or ideas of another person as if they were your own. Examples of plagiarism are (1) submitting an assignment as if it were one's own work when, in fact, it is at least partly the work of another; (2) submitting a work that has been purchased or otherwise obtained from an Internet source or another source; and (3) incorporating the words or ideas of an author into one's paper without giving the author due credit.

Please read the complete policy at http://www.sfasu.edu/policies/4.1-student-academic-dishonesty.pdf

Withheld Grades Semester Grades Policy (A-54)
Ordinarily, at the discretion of the instructor of record and with the approval of the academic chair/director, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F. If students register for the same course in future terms the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Students with Disabilities
To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 468-3004 / 468-1004 (TDD) as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

Acceptable Student Behavior
Classroom behavior should not interfere with the instructor's ability to conduct the class or the ability of other students to learn from the instructional program (see the Student Conduct Code, policy D-34.1). Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic, or other penalties. This prohibition applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare Early Alert Program. This program provides students with recommendations for resources or other assistance that is available to help SFA students succeed.
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<thead>
<tr>
<th>Time</th>
<th>CSC 430 Tentsile Schedule</th>
<th>01/02/20-20</th>
<th>01/02/20</th>
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<tbody>
<tr>
<td>8:00 AM</td>
<td>Review for Test</td>
<td>02/08/20</td>
<td>02/08/20</td>
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<tr>
<td>9:00 AM</td>
<td>Morning Instruction</td>
<td>02/09/20</td>
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<tr>
<td>10:00 AM</td>
<td>Review for Test</td>
<td>02/10/20</td>
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<td>11:00 AM</td>
<td>Morning Instruction</td>
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<td>12:00 PM</td>
<td>Lunch Break</td>
<td>02/12/20</td>
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<td>1:00 PM</td>
<td>Morning Instruction</td>
<td>02/13/20</td>
<td>02/13/20</td>
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<td>Review for Test</td>
<td>02/14/20</td>
<td>02/14/20</td>
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<td>3:00 PM</td>
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<td>5:00 PM</td>
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<td>6:00 PM</td>
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<td>02/18/20</td>
<td>02/18/20</td>
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<tr>
<td>7:00 PM</td>
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<td>02/19/20</td>
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<td>02/20/20</td>
<td>02/20/20</td>
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<td>9:00 PM</td>
<td>Morning Instruction</td>
<td>02/21/20</td>
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<tr>
<td>12:00 AM</td>
<td>Review for Test</td>
<td>02/24/20</td>
<td>02/24/20</td>
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</tbody>
</table>

The following dates are important:

- Final Exam (35%)
- 02/7/20
- Easter Holiday
- 02/20/20
- Spring Break
- 02/21/20
- Spring Break
- 02/22/20
- Spring Break
- 02/23/20
- Spring Break
- 02/24/20

Please refer to the official SFA academic calendar for any and all dates and times listed above.
Tentative Quiz Topics


All quizzes may include topics covered in previous class periods

**Quiz 01:** Level: Beginner  
Unit name: Excel - Add numbers in Excel 2013
1. Add numbers in Excel 2013 (3:03)
2. The SUM function (4:48)  
3. The SUMIF function (5:37)

**Quiz 01:** Level: Beginner  
Unit name: Excel - Basic math in Excel 2013
1. Basic math in Excel 2013 (2:35)
2. Using functions in Excel 2013 (5:19)
3. Operator order in Excel 2013 (2:12)

**Quiz 02:** Level: Intermediate  
Unit name: Excel - Average a group of numbers
1. Average a group of numbers (2:14)
2. AVERAGEIF function (3:14)
3. Weighted average (2:26)

**Quiz 02:** Level: Intermediate  
Unit name: Excel - Add or subtract time
1. Add time (3:33)
2. Subtract time (4:06)
3. Look up values on a different worksheet (2:37)
4. Copy a VLOOKUP formula (3:30)

One of the formulas in video #4 is incorrect. Can you tell me which one?

**Quiz 03:** AmortizeSchedule.xlsx

**Quiz 05:** Level: Advanced  
Unit name: Excel - Print worksheets and workbooks
1. Print worksheets and workbooks (1:09)
2. More print options (6:16)
3. Print a worksheet on a specific number of pages (4:40)
4. Print headings, gridlines, formulas, and more (4:52)

**Quiz 06:** AmortizeComparison.xlsx

**Quiz 07:** Level: Intermediate  
Unit name: Excel - Insert headers and footers
1. Insert headers and footers (2:10)
2. Page numbers in depth (3:34)
3. Header and footer details (4:02)

**Quiz 07:** Level: Advanced  
Unit name: Excel - Print worksheets and workbooks
1. Print worksheets and workbooks (1:09)
2. More print options (6:16)
3. Print a worksheet on a specific number of pages (4:40)
4. Print headings, gridlines, formulas, and more (4:52)

**Quiz 08:** Level: Advanced  
Unit name: Excel - Create a PivotTable and analyze your data
1. Create a PivotTable and analyze your data (1:35)
2. Create a PivotTable report manually (5:36)
3. Sort, filter, summarize, and calculate your PivotTable data (4:07)
4. Use slicers, timelines, and PivotCharts to analyze your PivotTable data (3:52)

**Quiz 09:** Level: Intermediate  
Unit name: Excel - Use conditional formatting
1. Use conditional formatting (2:03)
2. Conditionally format dates (2:44)
3. Conditionally format text (2:12)
4. Copy and remove conditional formatting (1:22)

**Quiz 09:** Level: Intermediate  
Unit name: Excel - Take conditional formatting to the next level
1. Take conditional formatting to the next level (3:38)
2. Use formulas to apply conditional formatting (4:15)
3. Manage conditional formatting (4:37)

**Quiz 10:** Level: Advanced  
Unit name: Excel - Advanced IF functions
1. Advanced IF functions (3:23)
2. Nested IF functions (3:31)
3. IF with AND and OR (3:35)
4. COUNTIFS and SUMIFS (5:31)
5. AVERAGEIFS and IFERROR (4:51)

**Quiz 11:** Level: Advanced  
Unit name: Excel - Password protect workbooks and worksheets
1. Password protect workbooks and worksheets (2:29)
2. Password protect workbooks and worksheets in detail (6:07)
Quiz 11: Level: Beginner  Unit name: Excel - Freeze or lock panes
1. Freeze or lock panes (1:23)  Alternate Link: https://www.youtube.com/watch?v=wj3OBiOP504
2. Freeze panes in detail (4:00)  Alternate Link: https://www.youtube.com/watch?v=6vSmxujkT0

Quiz 12: Level: Beginner  Unit name: Excel - Use AutoFill and Flash Fill
1. AutoFill and Flash Fill (1:47)  2. AutoFill (3:01)  3. Flash Fill (3:10)

Quiz 12: Level: Advanced  Unit name: Excel - Array formulas

Quiz 13: Level: Beginner  Unit name: Excel - Create a chart
1. Create a chart (1:04)  2. Create pie, bar, and line charts (3:35)  3. Customize charts (5:36)
4. Create a combo chart (1:51)
5. Copy a chart (3:17)

Quiz 14: Level: Intermediate  Unit name: Excel - Sort and filter data

Quiz 14: Level: Advanced  Unit name: Excel - Create and manage drop-down lists
1. Drop-down lists (1:01)  2. Drop-down list settings (4:37)
3. Input and error messages (2:47)  4. Manage drop-down lists (6:20)

Quiz 15: Excel 2010 keyboard shortcuts I: CTRL key shortcuts
1. Introduction (0:52)  2. Basic keyboard shortcuts (2:32)  3. Keyboard shortcuts for formulas (5:35)
4. Keyboard shortcuts for moving around workbooks (2:24)  5. Keyboard shortcuts for selecting (4:05)

Quiz 16: Level: Beginner  Unit name: Access - Design and build tables for a database (Access basics, part 1)
1. Key concepts and terms (4:35)  2. Start a new database from a blank template (4:09)
3. Build the first table and set data types (4:20)  4. Build tables with the Table Designer (4:17)
5. Use the Calculated data type to combine fields (1:51)

Quiz 17: Level: Beginner  Unit name: Access - Create table relationships (Access basics, part 2)
1. Creating relationships between your tables (5:07)  2. Create a relationship with the Lookup Wizard (3:19)
5. Create a one-to-one relationship (3:06)

Quiz 18: Level: Beginner  Unit name: Access - Introduction to queries (Access basics, part 3)
1. Introduction to queries (5:24)  2. Building queries with the Query Designer (4:45)
3. Build queries that use more than one data source (4:45)  4. Using outer joins (2:50)  5. Query unrelated data sources (4:45)

Quiz 19: Level: Intermediate  Unit name: Access - Use criteria in your Access 2013 queries
1. Use query criteria in Access 2013 (3:46)  2. Using AND and OR with multiple criteria (3:53)
3. Using the NOT, IN, LIKE, and BETWEEN operators (3:27)  4. Using wildcards in query criteria (3:06)

Quiz 20: Level: Intermediate  Unit name: Access - Use parameter queries to filter query results
1. Use parameter queries to filter your results (4:30)  2. Use logical operators and wildcards in parameter queries (2:59)
3. Parameter queries in Access Apps, part 1: Create and test the query (2:26)
4. Parameter queries in Access Apps, part 2: Create the views needed to run the query (4:56)
5. Use logical operators and wildcards in an Access App (4:57)

Quiz 20: Level: Intermediate  Unit name: Access - Stop a query from asking for input
1. Stop a query from asking for input (2:58)

Quiz 21: Level: Intermediate  Unit name: Access - Use update queries to change data in Access 2013
1. Use Update queries to change data in Access 2013 (4:20)  2. Use an Update query to change data in multiple fields (1:43)
3. Use an Update query to change data in multiple tables (2:01)

Quiz 22: Level: Intermediate  Unit name: Access - Using date criteria in queries
1. Using date criteria in queries (2:30)  2. Using calculated fields with date values (3:17)
3. Using DateDiff and DateAdd in your query criteria (4:18)

Quiz 23: Level: Intermediate  Unit name: Access - Make the switch to Access 2013
1. The Backstage (3:11)  2. Using files from previous versions (2:16)