

CLARENDON COLLEGE

Division of Business and Technology

Course Name: *CETT 1325.343 Digital Fundamentals*

Credit Hours: 3

Semester: *Spring 2012*

Classroom Location: *Childress Center Wind Room*

Instructor: *C. Murdock*

Office Location: *Childress*

Phone: *806-206-4518*

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Fax: *N/A*

Other: *940-937-2001*

Office Hours: 2:30 pm- 4:30pm Mon-Thurs and Fri 7:30 am to 11:30 am.

I. Course Description:

WECM: An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits

II. End of Course Learning Outcomes:

WECM: Construct digital circuits such as combinational logic circuits, clocking and timing circuits, and analog-to-digital and digital-to-analog devices; troubleshoot various digital circuits using schematic diagrams; and solve problems involving various numbering systems.

As a result of this course, you should be able to: Have a thorough understanding of binary concepts and how they relate to computer devices, an understanding of conversion between base 2 base 8, base 10 and base 16 math, an understanding of logic gates and how they are used in programmable devices, a brief understanding of how PLCs function, and an in depth understanding of timing, data strings, and data manipulation.

III. Tentative Course Content and Activities:

Textbook(s) (Required): **Floyd, Thomas L. Digital Fundamentals Tenth Edition, Prentice Hall, 2009**

**Tentative Spring Course Schedule
CETT 1325.343 Digital Fundamentals**

Week	Week Of	Lecture Topics
1	Jan 23, 2012	Syllabus, Class Contracts, and Media Releases
2	Jan 30, 2012	Introductory Concepts
3	Feb 6, 2012	Number Systems, Operations, and Codes
4	Feb 13, 2012	Logic Gates
5	Feb 20, 2012	Boolean Algebra and Logic Simplification
6	Feb 27, 2012	Combinational Analysis
7	Mar 5, 2012	Functions of Combinational Logic
8	Mar 12-16, 2012	Spring Break
9	March 19, 2012	Latches, Flip-Flops, and Timers
10	March 26, 2012	Counters
11	Apr 2, 2012	Shift Registers
12	Apr 9, 2012	Memory and Storage
13	Apr 16, 2012	Signal Interfacing and Processing
14	Apr 23, 2012	Computer Concepts
15	Apr 30, 2012	Review for Final Exam
16	May 7, 2012	Final Exam

Final exam on date/time as posted on Final Exam Schedule on Clarendon College website

IV. Course Requirements

Course requirements include problems and exercises, unit tests and final examinations derived from lectures. Assignments will be due one week from the day they were assigned unless special instruction is given by the instructor. Students must actively participate in class and attend class unless arrangements are made in advance for absence.

Pop Quizzes may be given.

Methods and components of evaluation and grading are listed in the following:

Problems and exercises:	30%
Quizzes:	30%
Final:	40%

Total	100%

The final semester grades will be figured as set in the current catalog:

- 90 and above = A
- 80-89 = B
- 70-79 = C
- 60-69 = D
- Below 60 = F

A student's final grade will be made available through Campus Connect at Clarendon College's website.

Methods of Instruction:

Lecture, PowerPoint presentation student interaction.

Other Requirements:

- Class Attendance is Required
- **No late homework will be accepted**
- Personal Tools and Supplies include: three ring binder, scientific calculator, and pencils, note paper (recommend graphing or engineering paper), etc...

Classroom Policies:

- Food will not be permitted in the classroom.
- Tobacco products will not be permitted in the classroom.

Classroom Conduct

Failure to comply with lawful direction of a classroom instructor is a disruption for all students enrolled in the class. Cheating violations include, but are not limited to: (1) obtaining an examination, classroom activity, or laboratory exercise by stealing or collusion; (2) discovering the content of an examination, classroom activity, laboratory exercise, or homework assignment before it is given; (3) using an unauthorized source of information during an examination, classroom activity, laboratory exercise, or homework assignment; (4) entering an office or building to obtain unfair advantage; (5) taking an examination for another person; (6) completing a classroom activity, laboratory exercise, homework assignment, or research paper for another person; (7) altering grade records; (8) using any unauthorized form of electronic communication device during an examination, classroom activity, or laboratory exercise; (9) Plagiarism. Plagiarism is the using, stating, offering, or reporting as one's own, an idea, expression, or production of another person without proper credit.

Disciplinary actions for cheating in a course are at the discretion of the individual instructor. The instructor of that course will file a report with the Dean of Students when a student is caught cheating in the course, whether it be a workforce or academic course. The report shall include the course, instructor, student's name, and the type of cheating involved.

Students who are reported as cheating to the Dean of Students more than once shall be disciplined by the Dean. The Dean will notify all involved parties within fourteen days of any action taken.

American with Disabilities Act Statement:

Clarendon College provides reasonable accommodations for persons with temporary or permanent disabilities. Should you require special accommodations, notify the Office of Student Services (806-874-3571 or 800-687-9737). We will work with you to make whatever accommodations we need to make.

Dropping a Course:

A student who is enrolled in a developmental course for TSI purposes may not drop his/her only developmental course unless the student completely withdraws from the college. A student may drop any other course with a grade of "W" any time after the census date for the semester and on or before the end of the 12th week of a long semester, or on or before the last day to drop a class of a term as designated in the college calendar. The request for permission to drop a course is initiated by the student by procuring a drop form from the Office of Student Services. (Refer to other policies concerning this issue in the current college catalog online.)

Withdrawal from College:

When a student finds it necessary to withdraw from school before the end of the semester, he or she should obtain a withdrawal form from the Office of Student Services. Students may also withdraw from the college by sending a written request for such action to the Registrar's Office. The request must include the student's signature, the student's current address, social security number and course information details. Students who withdraw after the census date for the semester and on or before the end of the 12th week of a long semester, or on or before the last day to drop a class of a term as designated in the college calendar will be assigned a grade of "W."

Classroom requirements:

The operation of cell phones, MP3 type devices, personal computers, or any other such devices is strictly prohibited during class sessions. The result of such use will result in a zero grade for the event (quiz/test) for that day including final exam day. Cheating, plagiarism or other dishonest acts shall be dealt with to the extent of dismissal from the class permanently on a case by case basis. Under no circumstance will an individual be exonerated after a second incidence, but will be immediately dropped.

Any missed quizzes or exams must be taken within 1 week of the date missed. It is the student's full responsibility to make arrangements to make up a quiz or exam at a time agreeable to the instructor. The Final exam will be taken on the prescribed day or arranged day prior to the final exam. No exceptions.