University of Massachusetts Dartmouth Department of Electrical and Computer Engineering

ECE 161 – Foundations of Computer Engineering II (Data Structures)

Instructor: Prof. P. H. Viall (pviall@umassd.edu)

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Phone: 508-999-8240

Web: http://ece161.viall.org (or http://ece161.org)

All projects, labs, and handouts are posted on the web (generally before class). There are no fancy graphics, only files available for download.

Most files are named according to the following format:

xx-yyyy-zzzzzzzzzzzvv.pdf where:

x is the class number that the item is handed out;

y is hout (handout), prjn (project n), or labn (lab n);

z is the description

v a version may be appended to the file name. If an error or omission is found in the assignment, I will post an updated handout (in addition to the original) with the suffix v , where v is 2, 3, 4...

If you miss class, please check the web to see if there were any handouts, and download them.

Due dates for all homework are also on the website under http://ece161.viall.org. Check here if there is a question about due dates.

Textbook: Data Structures in C by Noel Kalicharan

ISBN-13: 978-1438253275

emailing: You are welcome to email me about any concerns you have

(pviall@umassd.edu). Please email from your umassd.edu account. Non-umassd.edu email accounts which contain code often are stopped by UMD's spam-catcher. While I might chuckle at an email address like "luv2ski@hotmail.com", it is quite possible I'll never get the message,

especially if it contains code.

Grading: (3) Exams 75%

Labs and projects 25%

Labs and projects due on date specified

"I" grades are only given in accordance with the University policy

Exam dates: EXAM 1 - 02/20/2013

EXAM 2 - 04/03/2013 EXAM 3 - 05/01/2013

Note: even if other things "slide", exam dates will remain constant (except

as outlined in "Cancelled classes and exams", below)

Makeup Exams: Makeup exams are not given for individual exams. A generic make up exam will be given during the scheduled final exam period, or other

mutually agreed upon time.

Notes on labs:

Overall format of the labs and creation of lab handouts is my responsibility. Proctoring the labs and answering questions during the labs is the responsibility of the TA's.

Working together (projects & labs) is acceptable to a point.

- Working together appropriately means:
 - Talking about a problem in general terms
 - Helping another person fix a specific error
- * Working together inappropriately means
 - two people submitting the same program (except for name/minor changes)
- * Software (similar in function to "SafeAssign" or "TurnItIn" used in ENL 101 courses) may be used to compare submitted programs with those of other students from this semester or past semesters, as well as internet or other sources.
- * The penalty for cheating on a project or lab is a grade of -100 for the first offense (Not zero, but -100). This -100 will be used in calculation of your final homework average. Additional incidents of cheating will be met with harsher penalties.

Working together (exams) is NOT ACCEPTABLE:

- * Exams are definitely an individual endeavor
- * You may not work together during exams
- * You may not share any materials during exams
- * In general the penalty for cheating on an exam or otherwise covertly attempting to raise your grade on an exam shall be a 'F' for the course
- * For more information, please refer to the links given in the ECE 160 Academic Dishonesty Policy found on the last page of this handout.

Cancelled classes and exams:

- * If class is cancelled the day an exam is scheduled, then the exam will be held the next time the class meets.
- * If class is cancelled the session immediately prior to the exam (the day we would normally review), then the next time class meets we will have the "review day" and the meeting after that will be the exam.

Submitting labs and projects:

Labs and projects must be submitted electronically to your specific class directory. Unless you have received prior approval in writing (typically email), this is the only way labs and projects will be accepted. Emailing me a project or lab does not count as submitting it. No credit will be given for projects/labs submitted by email. However, if you have a problem with a lab or project, you may email your code to me with a question. This is NOT considered turning it in, however.

A handout specifying how to submit projects electronically will be distributed shortly. Unless otherwise specified, labs and projects are due by 23:59 (11:59 PM) on the date specified. Assignments submitted late are penalized as specified in the "Grading Rubric" handout.

Welcome to college life:

You have a great deal of freedom. Unlike in high school, I am not going to chase you to hand in homework. There is no detention for failing to turn in an assignment, being late to class, cutting class, or sleeping during class. It is your responsibility to obtain/complete handouts/assignments if you miss class (see web above).

Facebook/Linked-in/etc:

Because of possible negative perceptions, I ignore social website invitations from UMD students. After you graduate from the University, feel free to invite me as your friend.

Suggested Materials:

I will provide you with many pages of handouts. Frequently, it is helpful to refer to previous handouts. Whenever possible, handouts will be pre-punched for a three ring binder. Please consider procuring a three ring binder.

Laptop/tablet computers and exams:

Many students have opted to both procure electronic versions of the textbook as well as take class notes using a laptop or tablet computer. This presents a bit of a problem when a test is open book and note (NOT all exams will be open book/note). If this is the method that you use for textbook and notes, and you wish to use your computer for open book/note exams, then the following procedures must be followed:

- 1. 24-48 hours prior to the exam you must send me an email from your umassd email account saying you wish to use a laptop.
- 2. You must agree that you will only use the electronic version of the book, and notes that you took in class.
- 3. You will be assigned a seat near the front of the room, such that your lap top screen faces toward the front of the room.
- 4. You must agree that you will not run any type of programming tools during the exam.

Course objectives:

- 1. Apply knowledge of basic sciences (e.g. mechanics) in two programming lab assignments.
- 2. Understand, explain, implement, and evaluate the efficiency of basic searching and sorting algorithms and discuss their relative advantages.
- 3. Understand, explain, implement, and apply basic data structures: onedimensional and multi-dimensional arrays, linked lists, stacks, queues, binary trees, and hash tables.
- 4. Understand, explain, and apply recursion in algorithms.
- 5. Write coherent, properly documented code.

Other support:

- * For tutorial help, the Engineering & Science Center is available to students at no charge. They are located in SENG-217. This is an excellent resource that is often ignored. Don't wait until you are in deep trouble to seek out the tutoring center. Seek it out sooner.
- * For physically disabled students, there are support services provided through the Center for Access and Success. The center is located at Pine Dale Hall, Room 7136. Their email is access_success@umassd.edu.

NAME: STUDENTS COPY

University of Massachusetts Dartmouth Department of Electrical and Computer Engineering

ECE 161

Academic Dishonesty Policy

I, the undersigned understand the following about ECE 161 with regard to academic dishonesty:

- 1. Academic dishonesty is not tolerated in this course. Academic dishonesty includes, but is not limited to:
 - representing the work of another person as your own without due credit;
 - cheating on an exam or otherwise covertly attempting to raise your grade on an exam;
 - covertly changing (or attempting to change) grades;
 - doctoring or attempting to doctor timestamps for submitted projects or labs.
- 2. The penalty for any type of academic dishonesty involving an exam is a 'F' for the course. If academic dishonesty is discovered and a grade of 'F' assigned, withdrawal from the course will not be allowed.
- 3. The penalty for any type of academic dishonesty involving a project or lab is a lowering of grade (to -100) for that assignment. In the event that academic dishonesty is found on a project or lab, the instructor may review previous assignments for evidence of academic dishonesty. If academic dishonesty is found in previous assignments, those grades may be changed as well. Harsher penalties will be given for subsequent infractions.
- 4. The ECE Academic Integrity Officer will be notified of all incidents of academic dishonesty, such that a record is kept to monitor such behavior in multiple courses. Other persons may be notified as well including the ECE department chairperson, and the office of the College of Engineering dean.
- 5. If a student is academically dishonest, and it is discovered by the instructor, the instructor is not interested in how much stress the student was under, how their parents are going to react (to a failing grade), or how this affects any scholarships, or any other problems the student may suffer. This sounds cold and uncaring toward the person who was academically dishonest; the goal, however, is to reward the person who works honestly.
- 6. Any student has the right to appeal their grade informally to the Associate Dean of Engineering, or formally to the appropriate UMD entity, if they feel they have been unjustly charged with academic dishonesty. For details, refer to: http://www.umassd.edu/policies/activepolicylist/academicaffairs/academicintegritypolicyandreportingform/ or http://www.umassd.edu/studentaffairs/studenthandbookintroduction/academicregulationsandprocedures/
- 7. Once the price has been paid (i.e a lowering of an assignment grade or a 'F' for the course), the instructor will forget the incident, and the student may retake the course without prejudice. If the instructor is the students advisor, the student may continue to receive help and advice from him.

I the undersigned have read and understand the instructor's policy on Academic Dishonesty.

STUDENTS COPY	
Signature	Date
Print Name	