

COURSE MANAGEMENT PLAN

ELECTRONICS (Related) GRADE 10

Teacher: Ms. Winter- Room Number: 113

TEXTBOOK:

Electricity & Electronics, Gerrish/Dugger/Roberts, Goodheart-Willcox; c. 2004

COURSE BENEFITS:

- This is the second year (Grade 10) of a four year course taught on the principles and fundamental theories of Basic Electricity and Electronics.
- Each student, upon successful completion of the two semester Sophomore curriculum, should have a thorough understanding of the nature and sources of DC and AC electricity, Ohm's Law, AC circuit analysis for series and parallel circuits, the use of basic grade appropriate diagrams and schematics, the circuit devices and stages common to power supplies, the manipulation of a hand held digital multi-meter and the proper set-up of an oscilloscope for circuit measurements of the frequency and amplitude of voltage, current.

COURSE OUTLINE:

- **SEPTEMBER** – Chapter 9: MAGNETISM; Chapter 10: GENERATORS
- **OCTOBER** – Chapter 11: DC MOTORS; Chapter 12: TRANSFORMERS
- **NOVEMBER** – Chapter 13: AC MOTORS; Chapter 14 (intro): INDUCTANCE AND RL CIRCUITS
- **DECEMBER** – Chapter 14 (cont'd.): INDUCTANCE AND RL CIRCUITS
- **JANUARY** – Chapter 15: CAPACITANCE AND RC CIRCUITS
- **FEBRUARY** - Chapter 16: TUNED CIRCUITS AND RCL NETWORKS
- **MARCH** - Chapter 17: INTRODUCTION TO SEMICONDUCTORS AND POWER SUPPLIES
- **APRIL** – Chapter 18 (18.1-18.4 only): TUBES, TRANSISTORS AND AMPLIFIERS
- **MAY** – Chapter 22 (22.1-22.6 only): AM and FM RADIO COMMUNICATION
- **JUNE** – Chapter 24: FIBER OPTICS AND LASERS

REQUIRED DAILY STUDENT MATERIALS:

- Electricity & Electronics Text (assigned and covered at all times)
- Pen or pencil (dark ink; no red or pink, please)
- Scientific Calculator (NOT an expensive one; basic is fine...about \$10.-15.00)
- Notebook (NOT to be shared with any other class or shop)
- Folder with pockets or a three ring binder (for many handouts in class)

GRADING POLICY:

Test/Quiz Average.....25%
Daily Grade (on time/on task/in seat/working quietly/cooperating with others).....25%
Daily class assignments, projects, and/or homework.....50%

HOMEWORK:

Given on an as-needed basis, or when class period time isn't sufficient to finish a particular assignment despite good effort during class on the part of the student(s). Homework must be handed in before the class begins the next school day.

CLASS PARTICIPATION:

- Attendance – in class *on time* and present for the entire class.
- Tardiness: after three class tardies, detentions will be given.
- Be prepared and ready for class (see required items).
- Be in your seat immediately after the bell.
- Effort is required (attentive, respectful, stay on task; DO NOT distract others).
- Stay in your seat until the bell rings.

PERMISSION TO LEAVE CLASS:

- Student must have his/her agenda to leave class for any reason. NO exceptions.
- Bathroom trips should be only in case of personal emergency.
- Permission to leave to get books or supplies may be refused; come prepared.
- Students will not be given permission to leave class on any regular basis.

EXTRA HELP:

I urge you to seek help when it's necessary – not at the end of each marking period.

PLEASE NOTE: IF you have paid careful attention in class, have completed all of your class work and are trying your best, but still experiencing difficulty – or you have been absent – **I will then be happy to give you extra help.**

- Help is available daily immediately before 7:45 and after 2:09 in Room 113.
- With prior arrangements made by the student, I am willing to stay to help for more extended time after school whenever my schedule permits.

MAKE-UP GUIDELINES (Please review student agenda):

- You are responsible for obtaining any information, assignments and/or notes missed due to absence or tardiness. You must see me before or after class on the day of your return about scheduling a missed quiz or test.
- You will have the same amount of time to complete the missed work as the rest of the class had, unless other arrangements are made.

- Late work will be considered, but may lose some credit. After a week, the grade becomes a zero.

EXTRA CREDIT:

It is rare that assignments for extra credit are given. "Extra" means to go beyond. Therefore, a student who is missing class work or choosing not to fully participate will not be given the opportunity to earn extra credit.

CLASSROOM EXPECTATIONS:

- Follow the rules set in the student handbook: NO hats, NO food/drinks, etc.
- Keep hands and feet to yourselves.
- Personal property is OFF LIMITS to others.
- Treat every class member with respect.
- Be an active participant; YOU are in charge of your education.
- ONE person at a time may speak. If I am speaking, please do not interrupt.
- If you should have a question to ask or an opinion to share, please raise your hand. I encourage and value your thoughts and questions, but do not wish to be interrupted in mid-sentence.
- Volunteer responses to questions asked by me or by your classmates...but, please raise your hand first.
- Text books are numbered and assigned to each student. This is expected to be the same book number being returned at the end of the year. A book with a different number will not fulfill the student's obligation to maintain his/her own book and said student will be billed for the missing text book.

Failure to follow any rules in this course management plan or the student handbook will result in a reduction of the appropriate grade area and/or disciplinary action appropriate to the rule violated.

Please sign and return this form acknowledging that you have read and understand the above information in regard to the Electronics Related course management plan. If you have any questions or concerns please contact me through the school at extension 113. Thank you for your anticipated cooperation.

Teacher:

Student signature and date_____

Parent/Legal Guardian signature and date_____

