Syllabus for: (name of class)	**Math 30 *College Algebra***	
Semester & Year:	Spring 2014	
Course ID and Section Number:	Math 30-E6103	Math 30-E6630 "Hybrid"
Number of Credits/Units:	4 units	
Day/Time: **Location:**	MW 6:05-**8:10pm** (E6103) Room SC204.	MW 6:05-**7:30pm** (E6630 "Hybrid"), SC 204; with additional Days TBA, Times TBA, Room TBA
Instructor's Name:	Teresa "Tami" Matsumoto	
Contact Information:	Office location and hours: SC 205-B, Eureka Campus; M 3:30-4:30, TWThF 1:30-2:30 Phone: (707)476-4543, Fax: (707)476-4424 Email: tami-matsumoto@redwoods.edu	

Course Description (catalog description as described in course outline): A course covering first-degree and absolute value equations and inequalities; composite and inverse functions; polynomial, rational, exponential, and logarithmic functions; systems of equations; matrices; sequences and series; mathematical induction; binomial expansion theorem; and complex numbers.
Note: A graphing calculator is required, TI-83 or 84 recommended.

Student Learning Outcomes (as described in course outline) :

1. Evaluate and interpret a difference quotient symbolically, numerically, and graphically.
2. Find and interpret the real and complex roots of a polynomial symbolically, numerically, and graphically.
3. Produce an accurate graph of a rational function by hand, and identify all salient features.
4. Demonstrate and interpret the inverse relationship between exponential and logarithmic functions.
5. Solve problems and applications involving exponential and logarithmic functions.
6. Solve 3x3 linear systems of equations using matrices and elimination, and interpret the nature of the solution set geometrically.
7. Recognize and solve problems involving arithmetic and geometric sequences and series.

Special accommodations: College of the Redwoods complies with the Americans with Disabilities Act in making reasonable accommodations for qualified students with disabilities. Please present your written accommodation request at least one week before the first test so that necessary arrangements can be made. No last-minute arrangements or post-test adjustments will be made. If you have a disability or believe you might benefit from disability related services and may need accommodations, please see me or contact Disabled Students Programs and Services. Students may make requests for alternative media by contacting DSPS.

Academic Misconduct: Cheating, plagiarism, collusion, abuse of resource materials, computer misuse, fabrication or falsification, multiple submissions, complicity in academic misconduct, and/ or bearing false witness will not be tolerated. Violations will be dealt with according to the procedures and sanctions proscribed by the College of the Redwoods. Students caught plagiarizing or cheating on exams will receive an "F" in the course.

The student code of conduct is available on the College of the Redwoods website at: http://redwoods.edu/District/Board/New/Chapter5/AP%205500%20Conduct%20Code%20final%2002-07-2012.pdf

Additional information about the rights and responsibilities of students, Board policies, and administrative procedures is located in the college catalog and on the College of the Redwoods homepage.

College of the Redwoods is committed to equal opportunity in employment, admission to the college, and in the conduct of all of its programs and activities.

Math 30 College Algebra

Information follows in these sections:

1. About College Algebra
2. Course Structure
3. Materials you will need
4. Policies
5. Schedule
6. Course Content
7. Assignments
8. Guidelines for Written Assignments
9. Your Own Personal Math REFERENCE BOOK

1. About College Algebra

This course, Math 30 College Algebra is a transfer-level math course needed for preparation for calculus. Math 25 (Trigonometry) and Math 30 (College Algebra) together constitute what is often referred to as "Precalculus" and both courses are required prerequisites for Math 50A Calculus.

We will study several different families of functions. Understanding how functions work is critical for success in this course. Students who have already had Math 25 Trigonometry (or a similar course) have an advantage in that they have more experience working more deeply with functions and function behavior. Students who have yet to take Math 25 Trigonometry (or some other pre-calculus course) will have an advantage after completing this course because they will be starting that other course with more experience with different kinds of functions.
In this course, you will need to learn (a la Bloom):

- Knowledge
    - Definitions
    - Types of Graphs
    - Different Formulas
    - Main Ideas
- Comprehension
    - How related things compare (similarities, differences)
    - Relationships among different functions
    - How to manipulate functions in expressions and equations
- Application
    - How to apply what you know to real-life situations
    - How to make good use of information
    - How to solve problems, combining together what you have learned
- Analysis
    - How to make inferences from analysis of complex information
    - Recognizing importance and significance of component parts
- Synthesis
    - How to understand a situation and pull together all that you have learned
- Evaluation
    - How to look back to assess what was done (by you or others) and evaluate the results

2. Course Structure

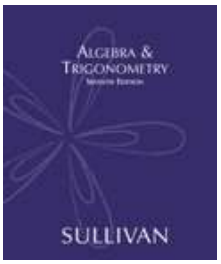
"***HYBRID***" and "Non-Hybrid" sections together: One section is called "hybrid" because it is partly like a regular class, and partly online. This section has two class meetings every week, so you do get SOME lecture and "face time" with the instructor, but the class meetings are shorter than in a "traditional" Math 30 class. The way we scheduled it, the "hybrid" class overlaps with the "non-hybrid" class, so at 7:30, the "hybrid" class is over. In the rest of the class session for the non-hybrid class, we will not cover any **new** material, but will have more time for questions and examples. Exams, when given in the non-hybrid class, will be during the non-hybrid class time. "Hybrid" students are welcome to stay during the non-hybrid class, any time.

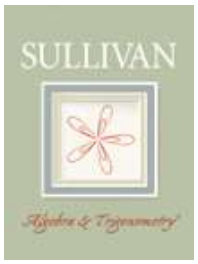
Course Structure

- You study the material in the text (which is organized into 9 learning units).
- You attend class sessions, and you do homework (part in the textbook, and part online "pretest" homework assignments).
- Each unit has a Unit Exam. "Hybrid" students take the Unit Exams in the ASC, online and proctored, outside of class meeting time, and must do that by the deadline for that unit. ("Non-Hybrid" students will have exams on paper during non-hybrid class time.)

3. Materials you will need:

- **Required Text**: ***Algebra & Trigonometry***,
  by Michael Sullivan, published by Prentice Hall
  (6^{th} or 7^{th} or 8^{th} edition).
  This book is used in both Math 25 and Math 30. A limited number of textbooks are available at the CR library and can be checked out for the entire semester. The textbook can also be purchased very inexpensively from various online book sellers.





- **Bound Notebook with Grid Paper**:
  Roaring Spring #77475 or Ampad #26-251 (about $2 - $6), for example. Make sure it is **bound** and has **graph paper** in it. You will use this throughout the course to build yourself a reference book (see the "Reference Book Information" handout also).

- **Time. Lots!!** In your own weekly schedule please make sure that you have blocked out at least 15 hours *(possibly as much as 20 hours)*, per week, to devote to this class.

- **An Email Account and Access to the Internet**. I expect you to have access to a computer and expect to be able to contact you easily.

- **Calculator**: A ***Graphing*** Calculator (TI-83 or TI-84 recommended). On the Eureka campus, a limited number of rental calculators are available from the Math Lab in the ASC.

- **Paper**: Homework Paper and scratch paper, lots of it! It is fine with me if you RE-USE paper. Paper that's only been used on one side is still fine (in general) on the other side. You will also need some graph paper. G0et it in a pad or a package of loose-leaf sheets (rather than stuck in a notebook), or print it from the web. Many people find it helpful to get graph paper with heavier lines on every fifth line to make counting easier.

- **Pencils**: Lots. Math problems should be done in pencil in this class (as in math classes in general). If you like softer lead (I find it writes darker easier) then you might like "2B" mechanical pencil lead (I prefer "2B" to "HB" which I find not as easy to work with).
- **Erasers**: At least one.
- **A ruler**: Important for drawing graphs carefully and correctly.

4. Policies

Mathematics Department Policy Regarding "Faculty Withdrawal" of Students after Census Day:
A student who is absent from class for the amount of time equal to two weeks of classes can be withdrawn from the course, unless there are extenuating circumstances that are communicated to the instructor in a timely manner. This "faculty withdrawal" can occur between Week 4 and Week 10 of the semester.

HELP?! If you have questions, please get help! It is ***your*** responsibility to seek help if you need it. I will answer some questions in class, but unfortunately, we will not have enough time to answer all of everyone's questions.

- Signing up for Math Lab is highly recommended. There are various options, so find out what will work best for you.
- Tutors are also available in the ASC (for any CR student – you need not be registered in Math Lab to meet with a tutor)
- Getting together in study groups is also highly recommended.
- Office Hours: if you want to meet with me, come to Office Hours or make an appointment.

You are expected to use your "mycr.redwoods.edu" email address. You can set it up to forward to another email address if you prefer. Instructions for forwarding are posted there.

You might like to sign up for emergency notifications: https://www.getrave.com/login/Redwoods

Course Grading: Your final course grade will be determined by a combination of point totals in the course and the professional judgment of the instructor. Plusses and minuses will be assigned where appropriate. The tentative approximate weighting for the course is:

Textbook: Reading, Problems, Reference Book	10%
Other assignments , including "Written Assignments"	10%
Online Homework (including "Pretests")	20%
Unit Exams (9 of them)	35%
Mid-term	15%
Final Exam	10%

Approximate Grade cutoffs:

A or A-	Guaranteed for 85% and above
B- (or better)	Guaranteed for at least 72%
C- (or better)	Guaranteed for at least 60%
D (or better)	Guaranteed for at least 50%

CAVEAT: The above procedures are subject to change.

5. **Schedule – Math 30 E6630/E6103** – College of the Redwoods – Fall 2014

Week#	Monday	Tue	Wednesday	Thu	Fri
1	Aug 25 **[UNIT 1]** • Introduction • R.1-6, R.8 Review; • 1.1 Linear Equations	Aug 26	Aug 27 **[UNIT 1]** • 1.2 Quadratic Equations	Aug 28	Aug 29
2	Sep 1 **Labor Day** (CR/HSU Holiday)	Sep 2	Sep 3 **[UNIT 1]** • 1.4 Radical Equations; Quadratic Form; Factorable	Sep 4	Sep 5 **Unit 1 TARGET**
3	Sep 8 **Census Day** **[UNIT 2]** • 1.6 Abs Value Equations • 1.5 Linear Inequalities	Sep 9	Sep 10 **[UNIT 2]** • 1.6 Abs Value Inequalities	Sep 11	Sep 12 **Unit 1 Deadline**
4	Sep 15 **[UNIT 2]** • 1.2, 1.5, 1.7 Applications **[UNIT 3]** • 3.1 Functions	Sep 16 **Unit 2 TARGET**	Sep 17 **[UNIT 3]** • 3.2 Graphs of Functions • 3.3 Properties of Functions • 3.4 Fn Library; piece-wise	Sep 18	Sep 19 TLAP **Unit 2 Deadline**
5	Sep 22 **[UNIT 3]** • 3.5 Transformations • 5.1 Composite Functions • 3.6 Math Modeling; Appl'ns	Sep 23 **Unit 3 TARGET**	Sep 24 **[UNIT 4]** • 4.1 Quadratic Functions & Models	Sep 25	Sep 26 **Unit 3 Deadline** **Nat American Day**
6	Sep 29 **[UNIT 4]** • 4.2 Polynomial Functions	Sep 30	Oct 1 **[UNIT 4]** • 4.3-4 Rational Functions	Oct 2	Oct 3 **Unit 4 TARGET**
7	Oct 6 **[UNIT 5]** • 4.5 Polynomial & Rational Inequalities	Oct 7 **Unit 4 Deadline**	Oct 8 **[UNIT 5]** • 4.6 Real Zeros of Polys • 1.3 Complex Numbers	Oct 9	Oct 10
8	Oct 13 **[UNIT 5]** • 4.7 Complex Zeros of Polys	Oct 14 **Unit 5 TARGET**	Oct 15 **Review for MT (Units 1-5)**	Oct 16	Oct 17 **Unit 5 Deadline**
9	Oct 20 **Review for MT (Units 1-5)**	Oct 21 **Midterm TARGET**	Oct 22 **[UNIT 6]** • 5.2 Inverse Functions • 5.3 Exponential F'ns	Oct 23	Oct 24 **Midterm Deadline**
10	Oct 27 **[UNIT 6]** • 5.4 Logarithmic Functions	Oct 28	Oct 29 **[UNIT 6]** • 5.5 Properties of Logs	Oct 30	Oct 31 **Unit 6 TARGET**
11	Nov 3 **[UNIT 7]** • 5.6 Log, Exp'l Equations • Computing Large Powers	Nov 4 **Unit 6 Deadline**	Nov 5 **[UNIT 7]** • 5.5,5.7,5.8 Applications (Log Scales, Compound Interest, Exp'l Growth & Decay)	Nov 6	Nov 7
12	Nov 10 ***Veterans Day*** (CR/HSU Holiday)	Nov 11 **Unit 7 TARGET**	Nov 12 **[UNIT 8]** • 12.1-2 Sequences • 12.3 Geometric Seq, Series	Nov 13	Nov 14 **Unit 7 Deadline**
13	Nov 17 **[UNIT 8]** • 12.4 Math'l Induction	Nov 18	Nov 19 **[UNIT 8]** • 12.5 Binomial Theorem	Nov 20	Nov 21
14	Nov 24 **Unit 8 TARGET** **[UNIT 9]** • 11.1 Systems of 2 eqns	Nov 25	Nov 26 **[UNIT 9]** **Unit 8 Deadline** • 11.1-2 Systems of 3 eqns	Nov 27 Thanks-giving	Nov 28 (CR Holidays)
15	Dec 1 **[UNIT 9]** • 11.6 Nonlinear Systems	Dec 2 **Unit 9 TARGET**	Dec 3 **Review for Final** (All Units)	Dec 4	Dec 5 **Unit 9 Deadline**
FINALS WEEK	Dec 8 **Final Exam TARGET** **5:30-7:30 Final Time Period**	Dec 9	Dec 10	Dec 11	Dec 12 **Final Deadline**

This Math 30 Calendar is Subject To Change.

6. Course Content: Brief Descriptions of Math 30 Units

Unit	*Brief Description*
1	**Review: Equations** -- Unit 1 is intended to be review. The focus is on solutions of equations. We will review how to solve linear equations, quadratic equations, radical equations, and "quadratic type" equations.
2	**Review: Applications and Inequalities** -- Unit 2 continues with review. The focus is on solutions of equations and inequalities. We will review how to solve linear inequalities, and equations and inequalities with absolute values. We will also review procedures for solving application problems, and study several typical types of applications that involve linear and quadratic equations.
3	**Functions: Properties, Combinations, and Transformations** In this unit, we will review the concept of a function, one of the fundamental concepts of mathematics. One of the main methods of studying a function is by analyzing the graph of a function, which is a visual representation of the function. The first part of this unit deals with the definition and properties of a function. This is followed by an analysis of the transformations of graphs produced by combining functions, which then leads into a more detailed study of the properties of combinations of functions. Finally, in the conclusion of the unit, we will use the concept of a function to model and solve real-world applications.
4	**Quadratic, (other) Polynomial, and Rational Functions** Unit 4 begins with a review of the quadratic functions and their applications to different problems. We study the vertex, axis of symmetry, and maximum or minimum value of a quadratic function. Then we review the general polynomial functions and the graphs of polynomial functions under various transformations. Finally, we analyze the graphs of rational functions by looking at the domain, intercepts, and asymptotes.
5	**Polynomial and Rational Functions: Solving Inequalities, and Finding Zeros** In Unit 5 we continue to work with polynomial and rational functions. The first part of the unit uses the work on graphing from Unit 4 to help solve polynomial and rational inequalities. However, the methods shown only work if you are able to factor the particular polynomial in question (or the numerator and denominator of the rational function). This is equivalent to being able to find the zeros of the polynomial. So the second part of the unit focuses on the general problem of finding the zeros of a polynomial. This problem is of particular importance in mathematics. It has historically been a difficult problem, but it is now much easier with the use of computers and graphing calculators. In this unit, it will be important to become very familiar and adept at using the graphing features of your calculator. In particular, you will need to be able to use your calculator to approximate the zeros of a function.
MT	**Midterm Exam** Material covered in Units 1-5.
6	**Inverse Functions; Exponential and Logarithmic Functions** This unit begins our study of exponential and logarithmic functions. First we will study the general topic of inverse functions. After defining the exponential functions in the next section, we use the concept of an inverse function to define the logarithmic functions. Finally, we will learn the important and very useful logarithm properties, which will be necessary in later sections for solving the logarithmic and exponential equations that arise in real-world applications.
7	**Exponential and Logarithmic Functions: Solving Application Problems** Unit 7 continues the study of exponential and logarithmic functions, with a heavy emphasis on applications. The unit begins with a study of the techniques for solving logarithmic and exponential equations. The skills that you learn in this section will then be used to solve real-world problems involving compound interest, population growth, radioactive decay, and temperature change.
8	**Sequences and Series; Mathematical Induction; Binomial Theorem** Unit 8 consists of two parts. The first part of the unit is an introduction to sequences and series. A sequence is just a function whose domain is the set of positive integers. This means that the values of a sequence can be written down as simply a list of numbers f(1), f(2), f(3), etc. A series, on the other hand, is formed by adding up the elements of a sequence. We will concentrate on two special types of sequences, arithmetic and geometric, along with the associated geometric series. Sequences and series both have many real-world applications. In particular, geometric series have applications to compound interest, loans, and annuities. In the second part of the unit we will look at the binomial theorem, another important formula in mathematics. To prove the binomial theorem, we will need to first learn about a different type of mathematical proof, called "mathematical induction". We can also use induction to prove many other mathematical formulas, particularly formulas involving sequences and series (for example, properties (7) and (8) for sequences).
9	**Systems of Equations** In this unit, instead of studying solutions of single equations, you will study solutions of systems of equations. You have probably learned about small (2x2) systems of linear equations in earlier courses. These small linear systems are easy to solve via the substitution method, but that method is very poor for larger systems. Thus, in this unit we will learn how to solve linear systems using the elimination method (the proper name is Gauss-Jordan Elimination). Systems of linear equations arise in many applications in many fields, and also in many areas of mathematics, so solving such systems is an important skill to learn. We will look at a number of real-world applications of both 2x2 and 3x3 systems. The unit concludes with a study of methods for solving nonlinear systems of equations (namely, 2x2 systems involving second-degree equations), and applications of such systems.
Final	**FINAL EXAM** Material covered in Units 1-9. NOTE: About 2/3 of the exam will cover the material from Units 6-9.

7. ASSIGNMENTS -- *What exactly do you have to do?*

1. **Textbook and Reference Book (10%)**
   Reading and Problems – For each Learning Unit, read the description and instructions – **This tells you which pages in the text to read** and **which problems in the book to do**. Your work on the textbook problems is to be turned in at the time of the Unit Exam and will be looked over quickly. You must verify the answers yourself – but doing them is an essential part of the process by which you learn the material. It is recommended that you work through examples in the text as you read through it, and work additional problems that are not assigned. The CD-ROM that comes with the text (7th edition) has good examples to view while you are reading and learning from the text.

   Reference Book – **You will create a "Reference Book"** throughout the course. Bring it to class regularly (especially for "Reference Book Quizzes") and it will be graded throughout the term. See the "Reference Book" instructions for specific details.

2. **Other Assignments (10%)** Some assignments will be different from problems in the book. Some may be explained on handouts, some may be discussion board assignments, some will be brief quizzes. Some will be in class without notes (not necessarily announced ahead of time), some will be "***Reference Book Quizzes***" on which you will be allowed to consult your own personal Reference Book, and some will be online.

   Written Assignments – In addition to the assigned textbook problems (which will be collected but not graded), for each unit, there will be a short written assignment to turn in – these WILL be GRADED. The point of these **very short** assignments is to get practice **writing** mathematics correctly. This is the only time I will grade your written work carefully, so you must take great care with these short assignments to write them out clearly and correctly. You will be given specific guidelines for these so that you know what you are expected to do. These can be redone and resubmitted.

3. **Pretest/Homework (20%)** –

"Hybrid" Section: Each unit has a "**Pretest/HW**" assignment in the "Optimath" Online Testing System. For each unit, you should do the "Pretest/HW" assignment more than once (at least three or four times). Your ***highest*** scores on these assignments count as part of your course grade.	"Regular" Section: Each unit will have designated homework that will count for this grade – some will be on Optimath, some will be from the text. The Optimath assignments can be done more than once. The highest score counts toward your course grade.

   [NOTE: "Optimath" **PRACTICE** assignments do not count directly toward your grade like the **Pretest/HW** assignments do.]

4. **Exams (online, in ASC)**

"Hybrid" Section: Exams will be taken online, in a proctored environment, in the ASC. N.B. *Exams done online during class meeting time will not count for credit* – if you take an exam while we are in class, your score will be 0	"Regular" Section: Exams will be done on paper and will be taken in class, unless there is a take-home exam, or a take-home portion of an exam.

   Unit Exams (35%) – For each Unit, there is a Unit Exam which must be taken by the Unit deadline. [Note for "Hybrid" Section: Unit Exams can be taken more than once, but **NOT on the same day** for the same unit. Prepare to take the Unit Exam by or around the Unit "Target Date" – then you still have a couple days before the Unit deadline to re-take the Unit Exam if you wish. (allowed ***once*** each day). You are allowed an hour for each Unit Exam (but allow a little more time in your schedule in case of technical difficulties).

   - **Midterm Exam (15%)** – After Unit 5, there is a Midterm covering all material from Units 1 through 5. [Note for "Hybrid" Section: Like Unit Exams, you must take this in the ASC, but unlike Unit Exams there is no "pretest" that is exactly like this, and you are allowed to take the Midterm only two times at most. You are allowed two hours for the Midterm.]
   - **Final Exam (10%)** – After Unit 9, there is a Final Exam for this course which must be taken by the end of Finals Week. It will focus on material in Units 6- 9. [Note for "Hybrid" Section: As with the Midterm, you take this in the ASC, you are allowed to take the Final two times at most, and you will get two hours in which to do it.]

8. Guidelines for Written Assignments (in general):

1. Use pencil.

2. Write neatly and legibly, using one side of the paper.

3. Work down the page (not across in paragraph-type form) like you usually see in texts.

4. On your paper, state the problem clearly.

5. On your paper, state your answer clearly in a manner appropriate to the context.

6. Write equivalent equations clearly, when appropriate, rather than loose expressions.

7. Show each step clearly (no big mystery jumps).

8. Do *not* use equal signs where things are not really equal.

9. ***Do*** use equal signs to show equality appropriately.

10. Use variables correctly. For instance, do not change the case of a variable. Also if you are using a substitution, do not use the same variable in a different way (e.g. substituting $\sqrt{x}$ with u is OK, but it is NOT OK to substitute $\sqrt{x}$ by using x).

11. Notation: Be careful to use correct symbols, and to make them the right size (e.g., make fraction bars and radical symbols large or long enough to include all that should be included).

12. Marks showing things like canceling must be correct. That is, if you read an equation *before* the marks *and after* the marks, the equation should still be true.

13. Use units throughout the problem, when they apply.

14. Make a good sketch of a graph or diagram, when applicable. Use a ruler to make straight lines. Indicate pertinent features (use color), and label axes and lines.

15. Check your answer and show that your answer is correct.

16. Reflect on the problem. For example, consider whether your answer seems appropriate (not just that it is mathematically correct), and look back over your work to see what worked well or if you might have done something differently. Learn from this experience what is good and what could be better, to help you do future problems. After you give it some thought, write down your reflection(s), and include that when you turn in the assignment.

9. Your Own Personal Math REFERENCE BOOK

During the term, you will create your own personal Reference Book. In your Reference Book, you will write definitions, graphs, examples, and instructions of things that you learn in this class. This book will be useful to you throughout this course, and especially in math courses you take after this one!

You will be allowed to use your Reference Book on our "Reference Book Quizzes" as well as when you are studying and working on your homework. The idea is to create something that will be useful for you long after this class is over, so be kind to your future self, by being clear and careful in your explanations and examples.

- **Get a bound notebook with grid paper** in it (sometimes called "quad ruled"). Composition books are about $2 to $4 dollars and are sold at the CR bookstore, Staples, and other places.

- **Make a Title Page**. The first page should be made into a title page. Create a title for your book, and include identifying information so it could be returned to you if you ever were to lose it.

- **Start the Table of Contents**. On the top of the next page (right side) write "Table of Contents" and reserve *the next several pages* for your Table of Contents to grow into. Skip at least 4 pages – more if your writing is large or if you anticipate entering particularly detailed information in your "T O C."

- **Page 1**. The first page that you write actual content information on should be numbered "1".

- **Number the following pages**. Number the pages, either odd and even on front and back, or you might prefer to number just the right-side pages 1, 2, 3, and so on, leaving the left sides blank at first.

- **Enter information regularly as you study and do your homework**. Keep just one basic topic on each page, even if you don't fill up every page. The important thing to remember is to make this useful for yourself, so that a year from now (for example), you will be able to find whatever you look for easily. Include page numbers from your textbook so that you can refer back to your text if needed. As you write material in your reference book, make a corresponding entry in the Table Of Contents (T.O.C.), listing the corresponding page number (in your reference book) at the right side of the TOC page.

- **What to write**: At times, I will direct you to include specific information in your Reference Book. Also, as you study, go over your class notes and read corresponding material in the text, synthesize important information and put it into your Reference Book. Definitions and explanations ***in your own words*** will be easier for you to understand later. Include examples and pictures, too.