Math 105, Term 1004

MATH 105- Technical Mathematics I
Devry University-DuPage Campus, Term 1004

Professor: Susan Sun Nunamaker; phone: (630) 652-8268;
E-mail: susan@nunamaker.com;
Web page: mathlady.org
ASC/Office Hours: Tues. (1:00-2:00P.M., 3:00-3:50P.M.);
Wed.: (11:00-11:50A.M.)
or ( by appointment).

Course Description:

This is a basic introductory college math course. Topics include basic math
operations, involving binary and signed numbers, exponent, number notations,
graphing, elementary algebra, and basic statistics. Critical thinking skills are
developed through application of these concepts to real-world problems.

Course Prerequisite:

Admission to the ECT or NSA program

Textbook(s) and other Required Material:

2. A scientific or engineering graphing calculator
**Course Objectives:**

Be able to:
1. Convert between various number systems (including decimal, binary, hexadecimal, and octal systems).
2. Perform addition and subtraction in decimal, binary, hexadecimal systems.
3. Perform arithmetic operations involving very large or very small numbers, using scientific notation.
4. Convert between English and SI (metric) measurement systems.
5. Solve linear equations or formulas for an unknown quantity.
7. Generate graphs on a rectangular coordinate system by plotting points from given data or from a linear equation.
8. Given a set of quantitative data, calculate measures of central tendency and dispersion, and present data graphically.

**Attendance:**

Attendance will be taken every session. Please remember to bring your student ID for attendance scan at the door. If a student is absent, he/she is responsible for all missed work and for obtaining any supplemental material given out during lecture. If a student is absent for three or more days, he/she should see the Attendance Counselor. Students may be dismissed from the class (at the discretion of the instructor) for too many absences. DeVry's attendance policy allows a professor to withdraw a student from a course when a student has been absent for 30% of the class hours of the course. If a student is withdrawn from a course, he/she must appeal to the professor of that course to be reinstated. If not reinstated, this can affect a student's eligibility for financial aid and will result in a "W" grade for the course. Students are encouraged to enter/leave class room in the beginning, during break, or end of the class period.

**Extra Help:**

Any student who requires additional help is encouraged to make use of any of these three avenues: 1. appointment with me (at my office or Academic Support
Center) . 2. during the break period of scheduled class time. 3. scheduling a tutoring appointment through Academic Support Center or Faculty Assistant Office.

**Classroom Etiquette:**

Students should not hold conversations with classmates whenever the professor is lecturing or whenever another student is asking questions during lecture. Students should refrain from passing notes or participating in other disruptive behavior. Students' undivided attention in class and an atmosphere of mutual respect is necessary for the professor to conduct the class. Students should enter or leave class in the beginning, during break, or at the end of the class period. The professor reserves the right to lower a student’s grade or to request a student to leave if the student engages in disrespectful conduct. Any student dismissed in this manner may not be readmitted into the class until he/she has spoken with the Dean of Students, the Program Dean, and the Instructor of the course.

**Other Policies:**

Students are expected to maintain a record of their own grades. A student should know where he/she stands at all times. Any question about the final grade for any course must be resolved before the end of the second week of the following term after the grade was received. *All quizzes, tests, class works, or other supporting documents should be retained through the resolution time and no changes (of grades) will be made without the proper supporting documents.* Everyone enrolled in or associated with this course is expected to conduct himself or herself in a manner respectful of the rights of other students, professors, and staff persons. This expectation includes the matter of cheating or falsification of quizzes, tests, final examinations and/or grades. Please refer to the student handbook for the academic integrity policy for the Institute's regulations regarding any disciplinary actions that may be taken.

**Diversity Statement:**

In accordance with DeVry Institute’s Mission Statement, we are a diverse college community of life long learners committed to promoting the acceptance and respect of individual differences that are inherent in our college. Through standards of conduct and diversity training we seek an environment that will insure the success, well being, and safety of our entire DeVry community. Therefore, it is our position to empower every one at DeVry to be responsible for each other and to actively uphold
the standards of conduct as defined in the student and employee handbooks. We support fair, equal and nondiscriminatory treatment as a responsibility of all members of our DeVry community. Students, faculty, staff and all other members of the DeVry community are expected to respect diversity which includes but is not limited to age, disability, gender, marital status, national origin, race, religion, and sexual orientation.

Students engaging in discriminatory behavior will be subject to the consequences established in the Student’s Code of Conduct in the Student Handbook. Student Grievances involving charges of discrimination and sexual harassment should be taken to the Student Services Office.

Any faculty, staff or other members of the DeVry community engaging in the discriminatory behavior will be subject to the consequences established in the DeVry Employee Handbook (Separation: Gross Misconduct). Faculty, staff and other members of the DeVry community with grievances involving charges of discrimination and sexual harassment should take them to the Human Resources Department or directly to the President’s Office.

**Grading Contract:**

<table>
<thead>
<tr>
<th>Grading Composition</th>
<th>Grading Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tests---------------</td>
<td>90-100---------</td>
</tr>
<tr>
<td>Final---------------</td>
<td>80-89---------</td>
</tr>
<tr>
<td>Quizzes-------------</td>
<td>70-79---------</td>
</tr>
<tr>
<td>Class Work---------</td>
<td>60-69---------</td>
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<tr>
<td>100%</td>
<td>&lt; 60---------</td>
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*The date of each test will be announced one week in advance. No make-up test should be given unless under dire circumstances; it is possible only if the professor is notified of such circumstances before or on the day of the test. Any make-up test should take place within two days of the original test time. The lowest test score of the term will be dropped.

*Final exam will be comprehensive and will cover the entire course material.
*Short, unannounced quizzes will be given frequently. Quizzes cannot be made up. If a quiz is missed, a grade of zero will be assigned. The lowest quiz grade will be dropped at the end of the term.
*Class works are good preparations for tests and quizzes and are often done in group effort. One lowest class work score may be dropped at the end of the term. Due date of each class work will be indicated at the upper right hand corner of each set of class work. For each day of delay in turning in the class work, there will be 2 points taken off. Please show work on all class works (this would help in figuring partial credits.)
*Home works will be assigned but will not be collected. Quiz questions are often taken from home work assignments.
*Extra credit opportunity will be given throughout the term.
DeVry University
DuPage Campus

MATH 105-Technical Mathematics I
(3 credit hour, Term 1004)

Professor Susan Sun Nunamaker

ACADEMIC CALENDAR

November 1, 2004-Classes begin. Proficiency exam applications available in room 228.
November 3 & 4, 2004-Preapproved proficiency exams (by appointment only).
November 5, 2004-Last day to add classes/labs (except Session B) for Term 1004.
November 12, 2004-Last day to drop/delete regular classes/labs for Term 1004.

Last day for students to request a review of any Term 0704 grades.

November 22, 2004-Last day for faculty to change a Term 0704 final grade.
November 25 & 26, 2004-No classes-Building closed-Thanksgiving Holiday.

December 19, 2004-January 2, 2005-No classes-Winter Break

January 12, 2005-First term day students are required to meet with an Academic Advisor before registering for Spring 2005 term.

January 13, 2005-Continuing student proficiency exam & FA applications (for 0205 Term) are available in room 228.

January 17, 2005-No classes-Building closed-Martin Luther King Day.
January 18, 2005-No classes-University Day.
January 24, 2005-Registration Holds posted on ISIS today.
January 25, 26, 27, 2005-Preapproved proficiency exams for continuing students.
January 28, 2005-Last day to withdraw from classes/labs w/a “W” (except for session B).
February 1, 2005-All continuing students must register for Spring 2005 classes.
February 18, 2005-All library material to be returned to the library.
February 21, 22, 23, 2005-Final Exam Week.
### Tentative Progress For MATH 105, Term 1004

*Mathematics for Electricity & Electronics, by Arthur D. Kramer, 2nd ed., Delmar*

*Professor Susan Sun Nunamaker*

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nov. 1-Nov. 5</td>
<td>Intro, 6.1, 6.2</td>
</tr>
<tr>
<td>2</td>
<td>Nov. 8-Nov. 12</td>
<td>6.3, 6.4, 6.5</td>
</tr>
<tr>
<td>3</td>
<td>Nov. 15-Nov. 19</td>
<td>1.1, 1.2, 1.3, 1.4</td>
</tr>
<tr>
<td>4</td>
<td>Nov. 22-Nov. 26</td>
<td>2.1, 2.2, 2.3, <strong>Thanksgiving</strong></td>
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<tr>
<td>5</td>
<td>Nov. 29-Dec. 3</td>
<td>2.4, review, Jeopardy, <strong>Test 1</strong></td>
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<tr>
<td>6</td>
<td>Dec. 6-Dec. 10</td>
<td>3.1, 3.2, 3.3, 3.4</td>
</tr>
<tr>
<td>7</td>
<td>Dec. 13-Dec. 17</td>
<td>4.1, 4.2, 4.3, 4.4</td>
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| 8    | Jan. 3-Jan. 7   | 5.1, 5.2, 5.3                                 |
| 9    | Jan. 10-Jan. 14 | Review, Jeopardy, **Test 2**                  |
| 10   | Jan. 17-Jan. 21 | **Martin Luther King & University Day**, 7.1, 7.2 |
| 12   | Jan. 31-Feb. 4  | 10.1, 10.2, 10.3                             |
| 13   | Feb. 7-Feb. 11  | 11.1, 11.2, Jeopardy, **Test 3**             |
| 15   | Feb. 21-Feb. 25 | **Final Exam**                                |

*Jeopardy: Game for extra credit opportunities*

*6.1: Chapter 6:Section 1 of the text *Mathematics for Electricity & Electronics*
MATH 105 Home Work Assignments, Term 1004

Mathematics for Electricity & Electronics, by Arthur D. Kramer, 2nd ed., Delmar

Professor Susan Sun Nunamaker

*6.1: p.131, odd # 1-45.
*6.2: p.136, odd # 1-29.
*6.3: p.140, odd # 1-33.
*6.4: p.144, odd # 1-47.
*6.5: p.147, odd # 1-21.

*1.1: p.5, odd # 1-33.
*1.2: p.11, odd # 1-33.
*1.3: p.18, odd # 1-57.
*1.4: p. 20, odd # 1-19.

*2.1: p.29, odd # 1-39.
*2.2: p. 34, odd # 1-59.
*2.3: p. 39, odd # 1-39.
*2.4: p. 41, odd # 1-27.

*3.1: p.51, odd # 1-45.
*3.2: p.60, odd # 1-39, odd # 45-57, odd # 61-65.
*3.3: p. 66, odd # 1-53.
*3.4: p.70, odd # 1-19.

*4.1: p. 80, odd # 1-65.
*4.2: p. 88, odd # 1-55.
*4.3: p. 91, odd # 1-37.
*4.4: p. 93, odd # 1-13.
*5.1: p. 105, odd #1-57.
*5.2: p. 110, odd #1-33.
*5.3: p. 120, odd #1-77.

*7.1: p. 157, odd #1-43.
*7.2: p. 163, odd #1-41.

*9.1: p. 185, odd #1-25.
*9.2: p. 188, odd #1-29.
*9.3: p. 192, odd #1-35.

*10.1: p. 205, odd #1-29.
*10.3: p. 212, odd #1-51.
*10.4: p. 215, odd #1-45.

*11.1: p. 225, odd #1-41.
*11.2: p. 233, odd #1-25.


*27.1: p. 531, odd #1-19.
*27.2: p. 536, odd #1-21.
*27.3: p. 539, odd #1-13.