Department of Electrical and Computer Engineering
University of Puerto Rico
Mayagüez Campus

INEL 4206 - Microprocessors
Course Information Sheet
(A.K.A. Prontuario)

IMPORTANT NOTE
Read this prontuario as soon as you get it and read it carefully! It contains the "rules of the game". Avoid unexpected surprises when it is too late to do anything about them. Ignorance of the law is no excuse for breaking it.

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1. Faculty & Staff

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2. Course Description

Architecture, organization and operation of microprocessors and their supporting devices; design of microprocessor-based systems.

You will find a detailed course outline in an accompanying handout.

3. Pre-requisites

INEL 4201 – Electronics I
INEL 4205 – Digital Circuits

4. Lectures

Tuesday, Thursday 9:00 AM – 10:20 AM, S-113

5. Course Credits

3 credits

6. Course Web Site

The course will have a website holding many useful resources to help your throughout the course. We try to make an effort to keep the site updated, but will invariably make mistakes and forget to update materials once in a while. PLEASE LET US KNOW ABOUT ANY PROBLEMS WITH THE WEBSITE AS SOON AS YOU DETECT THEM. We tend to get a fair amount of general criticism for not keeping the site up to date, but we seldom get an email notifying a broken of stale link. HELP US HELP YOU.

URL: http://www.ece.uprm.edu/~bvelez/courses/Spring2003/INEL4206/inel4206.htm
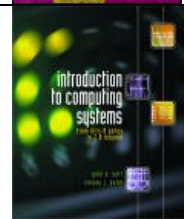
7. Textbook & References

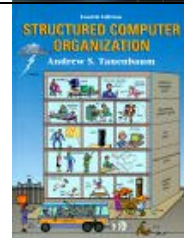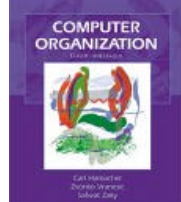**Computer Organization and Design : The Hardware/Software Interface**
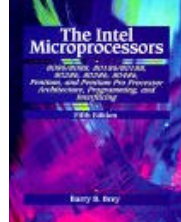by David A. Patterson, John L. Hennessy
Hardcover - 993 pages 2nd edition (September 1997)
Morgan Kaufmann Publishers; ISBN: 1558604286 ; Dimensions (in inches): 1.94 x 9.57 x 7.69

The following is a list of reference books in which some of the material discussed in class can be found:

		Computation Structures (MIT Electrical Engineering and Computer Science) by Stephen A. Ward, Robert H. Halstead **Hardcover** - 811 pages (December 13, 1989) MIT Press; ISBN: 0262231395 ; Dimensions (in inches): 1.84 x 10.36 x 8.39
		Introduction to Computing Systems : From Bits and Gates to C and Beyond by Yale N. Patt **Hardcover** Bk&Cd-Rom edition (September 2000) McGraw Hill College Div; ISBN: 0072440392
		Structured Computer Organization by Andrew S. Tanenbaum (Preface) **Paperback** - 669 pages 4 edition (October 23, 1998) Prentice Hall; ISBN: 0130959901 ; Dimensions (in inches): 1.21 x 9.55 x 7.25

	Computer Organization by V. Carl Hamacher **Hardcover** - 832 pages 5th edition (August 2, 2001) McGraw-Hill Higher Education; ISBN: 0072320869 ; Dimensions (in inches): 1.41 x 9.46 x 7.62
	Intel Microprocessors 8086/8088, 80186/80188, 80286, 80386, 80486, Pentium, and Pentium Pro Processor: Architecture, Programming, and Interfacing by Brey. Barry B., Barry B. Brey **Hardcover** - 966 pages 5 edition (June 11, 1999) Prentice Hall; ISBN: 0139954082 ; Dimensions (in inches): 1.66 x 10.35 x 8.34

If you are interested in buying one of these books fell free to ask the instructor for advice.

8. Email

Every student is required to have an email account accessible from the Internet. Email will be an essential means of communication between students and staff during the term. **Students and staff will be assumed to have received email within 48 working hours, not including weekends.** Both students and staff may make use of the following email lists:

List Name	Usage
inel4206-profs	Professors
inel4206-tas	Teaching Assistant
inel4206-students	Students
inel4206-forum	Students plus professor

You may not use the class mailing lists for personal matters not related to this course. Inadequate use of email may violate institutional policy on Internet and information technology use and may trigger disciplinary action. Please observe the rules of netiquette at all times.

9. Office Hours

Both the professor and the TA(s) will hold weekly office hours. This is an excellent opportunity to go over the material discussed in class on a one on one basis. Unfortunately, many students who may greatly benefit from it seldom visit the professor or the TA before their doubts have accumulated to the point where it becomes very hard to keep up with the course. We commonly get student complains near the end of the semester about the difficulty of some concepts and their inability to keep up with the course. Such complaints seldom come from students who have frequently attended office hours. If you do not understand a concept discussed in class please use this important resource. Bring your questions and remember that the dumbest question is the one that is never asked. IT IS OUR JOB AND GOAL TO HELP YOU MASTER THE COURSE SUBJECTS.

10. Course Evaluation

Your grade will be based **exclusively** on the scores that you obtain in the class problem sets, partial exams and a final exam. The weights assigned to each of these categories are as follows:

Evaluation Categories	Percentage Weight
Problem Sets	**20%**
Partial Exams (3)	**42% (14% each)**
Final Exam	**38%**

Your total score will be calculated as a weighted average of your average scores in each category.   Each individual problem set and exam will carry the same weight within its corresponding category. Your grade will be determined by a standard curve as follows:

Grade	Points Interval
A	[90, 100]
B	[80, 90)
C	[70, 80)
D or F	[0, 70)

<div style="color:red; text-align:center">

VERY IMPORTANT!
In order to pass the course you must turn in all your problem sets and attend all exams.

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Students are expected to provide the best possible solution to problem set and exam questions in order to get full credit. We will not only evaluate correctness; we will evaluate quality as well.

11. Problem Sets

Problem sets are homework assignments intended to allow the students the opportunity to expand on or practice the material discussed in class. The assignments may include exercises of diverse nature including: calculations, analysis and programming.

Each problem set will carry the same relative weight.   Although we encourage student collaboration **it is a requirement of this course that each student writes the answer to each problem set individually**.

You may turn in a problem set late, but you must always submit your problem sets to pass the class even if it accumulates no points towards your total score. A percentage of the score will be deducted for your score for late submissions as follows:

Days Late	Percent Deduction
1 day late	25%
2 days late	50%
3 days late	100%

As for exams, problem sets will be graded for both correctness and quality according to the following weights:

Criteria	Weight (%)
Correctness	60%
Design	20%
Efficiency	10%
Style & Documentation	10%

All problem sets will be submitted electronically. You will receive instructions for electronic submission of problem sets with each problem set.

12. Partial Exams

We will have three partial exams. Each exam will cover material up to and including the material covered before the date of the exam. However, emphasis will be placed on the material discussed but not tested by previous exams.

The exams will be administered out of class at dates and times to be announced during the first few weeks of the term, but never later than two weeks before the exam; this to allow for sufficient time for students to plan their studying. Once the dates of the exams are announced, they will not be subject to change. You are responsible for planning ahead of time. Having other exams the same day is no excuse for changing the dates.

Attending partial exams is a requirement of this course and missing an exam will be reason enough to fail the course, unless an arrangement can be worked out with the professor at least 24 working hours before the date of the exam.

Students must work individually on all exams. More on this below.

13. Final Exam

A comprehensive final exam will be administered at the time and date determined by the UPRM Registrar. The exam carries a weight of 38%.

14. Academic Integrity

El artículo 10 del Reglamento General de Estudiantes de la Universidad de Puerto Rico contiene 15 puntos que se consideran "infracciones de las normas esenciales al orden y a la convivencia universitaria y acarrean sanciones disciplinarias." He aquí uno de los puntos.

> *La obtención de notas o grados académicos valiéndose de falsas y fraudulentas simulaciones, o haciéndose pasar por otra persona, o mediante treta o engaño, o copiando total o parcialmente la labor académica de otro estudiante, o copiando total o parcialmente las respuestas de otro estudiante a las preguntas de un examen, o haciendo o consiguiendo que otro tome en su nombre cualquier prueba o examen oral o escrito.*

Violaciones a estos puntos pueden conllevar algunas de las siguientes sanciones:

1. *Amonestación*
2. *Probatoria por un tiempo definido durante el cual otra violación de cualquier norma tendrá consecuencia de suspensión o separación*
3. *Suspensión de la Universidad por un tiempo definido. La violación de los términos de la suspensión conllevará un aumento del período de suspensión o la separación definitiva de la Universidad.*
4. *Separación definitiva de la Universidad.*

El estudiante que viole este reglamento obtendrá F en la clase y su caso será llevado ante la junta de disciplina del Recinto. Evítese este mal rato, o aténgase a las consecuencias.