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

ICOM 4036 – Structure and Properties of Programming Languages

Prontuario - Fall 2003

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 rules is no excuse for breaking them.

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1. Faculty & Staff

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Office Hours: Wednesdays and Thursdays 3:00-4:30 PM

2. Course Description

Comparative study of programming paradigms including imperative, object-oriented, functional, logic, and concurrent programming with focus on main features produced by different languages for specific applications. Formal specification of the syntactic structure of a language, context-free grammars, parsing, and principles of language design.

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

3. Pre-requisites

ICOM 4035 – Data Structures

4. Lectures

Tuesday, Thursday 1:30 PM – 2:50 PM, S-230

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/Fall2003/icom4036/icom4036.htm

7. Textbook & References

Concepts of Programming Languages (5th Edition)
by Robert W. Sebesta
Hardcover: 720 pages ; Dimensions (in inches): 1.25 x 9.25 x 7.75
Publisher: Pearson Addison Wesley; 5th edition (July 31, 2001)
ISBN: 0201752956

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

	Programming Languages Principles and Practice by Kenneth C. Louden **Hardcover:** 650 pages ; Dimensions (in inches): 1.25 x 9.75 x 6.75 **Publisher:** PWS Publishing Co.; 2nd edition (July 15, 2002) **ISBN:** 0534953417
	Programming Languages Concepts and Constructs by Ravi Sethi, Tom Stone (Editor) **Hardcover:** 624 pages ; Dimensions (in inches): 1.22 x 9.53 x 7.70 **Publisher:** Addison-Wesley Pub Co; 2nd edition (February 1996) **ISBN:** 0201590654
	Programming Languages Principles and Paradigms by Allen B. Tucker, Robert E. Noonan, Robert Noonan **Hardcover:** 432 pages ; Dimensions (in inches): 1.25 x 9.25 x 7.50 **Publisher:** McGraw-Hill Science/Engineering/Math; (October 30, 2001) **ISBN:** 0072381116

An additional set of programming language references and manuals will be posted on the course website.

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
icom4036-profs	Professors
icom4036-tas	Teaching Assistant
icom4036-students	Students
icom4036-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

The professor 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)

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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 <u>the best possible solution</u> 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 <u>you must always submit your problem sets to pass the class even if it accumulates no points towards your total score</u>. 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 <u>both correctness and quality</u> according to the following weights:

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

Students will have ten (10) working days after their graded work is returned to them to make any claims about incorrect grading of problem sets or exams. No further claims will be considered after this time.

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 under academic integrity.

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.