



Institute of Statistics and Computer Information Systems Institute  
College of Business Administration  
University of Puerto Rico  
Río Piedras Campus

## **Computer Information Systems Program Educational Objectives**

[The purpose of this working paper is to describe the Advisory Board participation in the assessment of the program's objectives] [Learning Pedagogical Contribution (LPC)]

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**ACKNOWLEDGEMENTS**

To

Members of the Advisory Board.

All alumni and employers who participate in the surveys.

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## **Purpose of the Report**

This study reports on the continuous improvement of the Computer Information Systems (CIS) program objectives for the University of Puerto Rico, Río Piedras campus from August 1, 2010 to October 29, 2011.

## **Mission, Vision, and Objectives of the CIS Program**

### **Mission**

To form professionals that can effectively implement and manage information systems and technologies in organizations, both at the local and the global level.

### **Vision**

Be an academic CIS program that is recognized by its technical and professional excellence.

### **Objectives**

Objectives after its revision in October 2011:

- 1- To implement, manage the development of, or maintain information systems in an organization.
- 2- To apply technological, analytical, and critical thinking skills in the solution of problems related to information systems in organizations.
- 3- To take into consideration the context in which information systems operate when implementing and managing these systems.
- 4- To maintain his professional expertise by updating his knowledge in technology and information systems.
- 5- To perform his functions showing respect and appreciation for ethical values, interpersonal relationships, communication, and team work.

### **Initial Objectives**

Objectives were deliberated in the celebration of three focal groups<sup>1</sup>:

- 1- To implement, and manage the development of information systems in an organization.
- 2- To apply technological, analytical, and critical thinking skills in the solution of problems related to information systems in organizations.
- 3- To take into consideration the context in which information systems operate when implementing and managing these systems.
- 4- To maintain his professional expertise by updating his knowledge in technology and information systems.

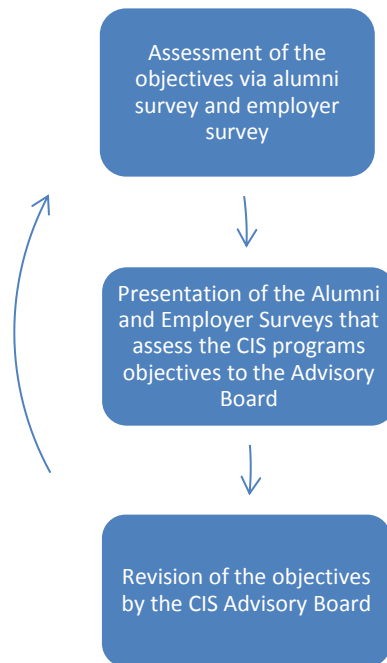
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<sup>1</sup> Rosarito Sanchez Morcilio and Katherine Franceschi, *Report on Program's Objectives Consultation*, May 2010 at <http://esta.uprrp.edu/acreditacion/ReportProgramConstituentConsultation-11-may-2010.pdf>

- 5- To perform his functions showing respect and appreciation for ethical values, interpersonal relationships, communication, and team work.

### **Continuous improvement process for the Objectives**

The continuous improvement activities to the CIS program’s objectives align with the program’s constituents is described in Figure 1. First, the CIS program’s objective assessment is conducted by either surveys or focal groups. Consistently, alumni and employers participate in these activities. Second, a presentation of the results for discussion of the results of the studies is organized for the Advisory Board in a formal meeting. Third, during the meeting the Advisory Board makes recommendations to update the CIS program’s objectives according to the needs of today’s business demands.



**Figure 1: Continuous improvement process for the objectives**

## **Advisory Board**

### **Members**

The CIS programs constituents are represented by the members of the Advisory Board. The actual members are:

- 1- Mr. Jorge Medero, President and Senior Consultant, Medero Roldán LLC (A local CPA and Management Consulting firm, and one of the largest business partners of SAGE AccPac ERP Software in Puerto Rico).
- 2- Ms. Lourdes Ortíz, Assistant General Auditor, Popular, Inc. (Popular, Inc. is the matrix of Banco Popular, the largest commercial bank in Puerto Rico).
- 3- Mr. Angel Pérez, Vice President and General Manager, Rock Solid Technologies (One of the largest IS consulting firms in Puerto Rico.).
- 4- Mr. Rafael Pérez-Tejera, IS Director, Oficina del Contralor de Puerto Rico (The Puerto Rico Comptroller's Office performs financial, operational and audits all government agencies and municipalities.).
- 5- Mr. Manuel Sánchez, IS Consultant former Vice-President for Information Systems at Cooperativa de Seguros Múltiples (One of the largest insurance organizations in Puerto Rico).
- 6- Miss Bonmarie Hernández, CIS alumnus (May 2011).
- 7- Miss Jennifer L. Ramírez, president of the student association "Asociación Estudiantes Estadística y Sistemas Computadorizados de Información", CIS student
- 8- Prof. Arnaldo I. Ramos, CIS professor.
- 9- Dr. Rosarito Sánchez Morcilio, CIS professor.

### **Advisory Board Agreements**

The revision of the objectives by the CIS Advisory Board was performed by their participation in different meetings. Figure 2 shows the main agreements for each meeting celebrated. The minutes of each meeting are presented in detail in Appendix 1.

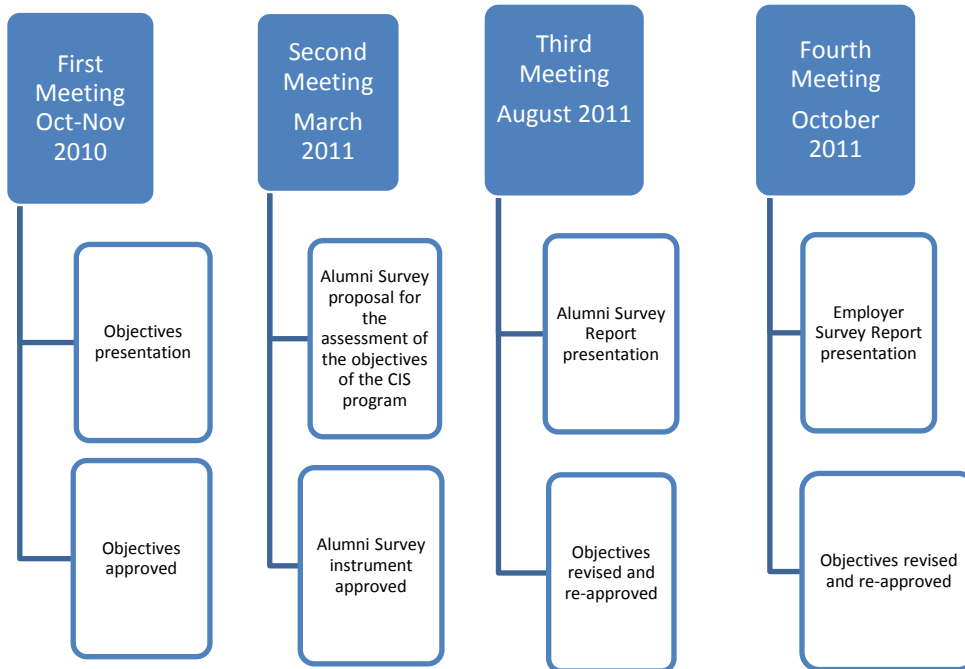


Figure 2: Advisory Board agreements summary

### Synopsis of the Presentations to the Advisory Board

Table 1 shows the summary of the results of the Alumni and Employer reports that was presented to the Advisory Board in different meetings. The minimum results expected for each objective are 75 % after adding the scores of the “very frequently” and “frequently” columns. Results of the two studies that were conducted, alumni and employer reports<sup>2</sup>, all the objectives were met, except for objective 1. After much debate regarding the fact that not many information systems professional have the chance of implementing an information system, the Advisory Board decided to re-phrase objective 1.

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<sup>2</sup> Sánchez, R., Ramos, A., Rodríguez Esquerdo, P.J. (September 16, 2011). *Information Systems Employer Report*. And Sánchez, R., Ramos, A., Rodríguez Esquerdo, P.J. (May 22, 2011). *Information Systems Alumni Report*. Both reports are published at <http://esta.uprrp.edu/acreditacion/>



## Computer Information Systems Program Educational Objectives Report

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**Table 1: Summary of the Results of the Alumni and Employer Reports**

	<b>UPR-RP CIS Objectives' Description</b>	<b>Alumni Report</b>		<b>Employer Report</b>	
		<b>Very Frequently</b>	<b>Frequently</b>	<b>Very Frequently</b>	<b>Frequently</b>
Objective 1	To implement and manage information systems in an organization.	16.1%	25.8%	56%	0%
		12.9%	22.6%	56%	0%
Objective 2	To apply technological, analytical, and critical thinking skills in the solution of problems related to information systems in organizations.	51.6%	25.8%	100%	0%
		54.8%	29%	100%	0%
Objective 3	To take into consideration the context in which information systems operate, when implementing and managing these systems.	58.1%	25.8%	89%	11%
Objective 4	To maintain his professional expertise by updating his knowledge in technology and information systems.	61.3%	22.6%	89%	0%
Objective 5	To perform his functions showing respect and appreciation for ethical values, interpersonal relationships, communication, and team work.	90.3%	9.7%	100%	0%
		83.9%	16.1%	78%	22%

### Revision of the objectives by the Advisory Board

Based on the results of the alumni and employers report, the only objective that required revision was Objective 1. Figure 3 shows the re-phrasing done to the objective by the Advisory Board.

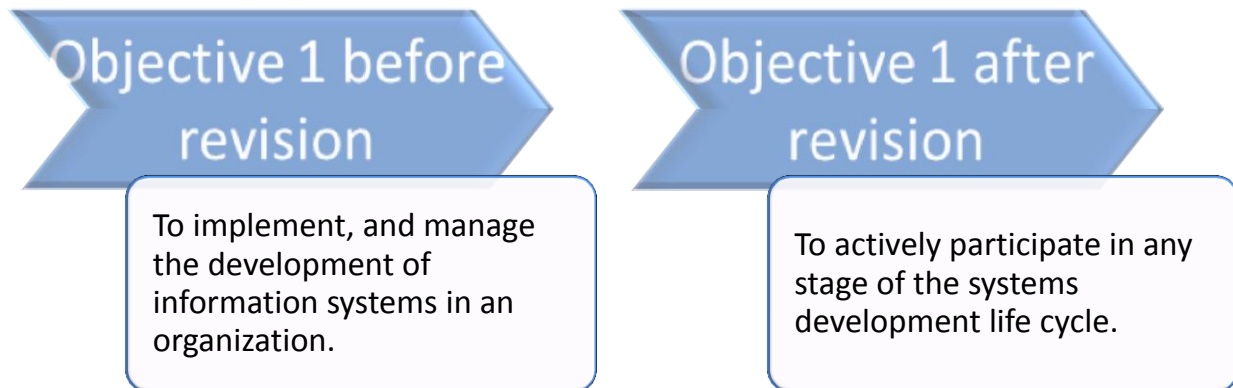


Figure 3: Revision of the objective 1

### Future Work

A continuous improvement of the program educational objectives is done by performing survey in odd years and focal groups in even years. The next activity to assess the CIS program's objective will be a focal group on March 2012.

## **References**

Sánchez, R., Ramos, A., Rodríguez Esquerdo, P.J. (September 16, 2011). *Information Systems Employer Report*.

Sánchez, R., Ramos, A., Rodríguez Esquerdo, P.J. (May 22, 2011). *Information Systems Alumni Report*.

Sánchez, R., Franceschi, K. (May 11, 2010). *Program's Objectives Consultation Report*.

All reports are published at <http://esta.uprrp.edu/acreditacion/>

**Appendices**

**Appendix 1**

**Advisory Board Meeting Minutes**



