

Course Competencies Template - Form 112

GENERAL INFORMATION			
Name: Diane King	Phone #: 77021		
Course Prefix/Number: CIS1321	Course Title: Introduction to Systems Analysis and Design		
Number of Credits: 4			
Degree Type	<input type="checkbox"/> B.A. <input type="checkbox"/> B.S. <input type="checkbox"/> B.A.S <input checked="" type="checkbox"/> A.A. <input checked="" type="checkbox"/> A.S. <input type="checkbox"/> A.A.S. <input type="checkbox"/> C.C.C. <input type="checkbox"/> A.T.C. <input type="checkbox"/> V.C.C		
Date Submitted/Revised: 07-28-2008	Effective Year/Term: 2009-1		
<input type="checkbox"/> New Course Competency <input checked="" type="checkbox"/> Revised Course Competency			
Course to be designated as a General Education course (part of the 36 hours of A.A. Gen. Ed. coursework): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
The above course links to the following Learning Outcomes: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Numbers / Data <input checked="" type="checkbox"/> Critical thinking <input checked="" type="checkbox"/> Information Literacy <input type="checkbox"/> Cultural / Global Perspective </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Social Responsibility <input type="checkbox"/> Ethical Issues <input checked="" type="checkbox"/> Computer / Technology Usage <input type="checkbox"/> Aesthetic / Creative Activities <input type="checkbox"/> Environmental Responsibility </td> </tr> </table>		<input checked="" type="checkbox"/> Communication <input checked="" type="checkbox"/> Numbers / Data <input checked="" type="checkbox"/> Critical thinking <input checked="" type="checkbox"/> Information Literacy <input type="checkbox"/> Cultural / Global Perspective	<input type="checkbox"/> Social Responsibility <input type="checkbox"/> Ethical Issues <input checked="" type="checkbox"/> Computer / Technology Usage <input type="checkbox"/> Aesthetic / Creative Activities <input type="checkbox"/> Environmental Responsibility
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Course Description (limit to 50 words or less, must correspond with course description on Form 102): This course introduces computer science and non-majors to fundamental skills of analysis and design of management information systems. Students learn the concept of charting, investigating, documenting and reporting using current information systems, system analysis tools and system design tools. The related concept of management, organization, computers, information processing and the system approach are combined and applied to case studies. Prerequisite(s): CGS1060. Knowledge of business accounting is recommended. Laboratory fee. (3 hr. lecture; 2 hr. lab)			
Prerequisite(s): CGS1060	Co requisite(s):		

Course Competencies: (for further instruction/guidelines go to: <http://www.mdc.edu/asa/curriculum.asp>)

Competency 1: The student will understand the concept of systems analysis by:

1. Identifying the responsibilities and role of the systems analyst.
2. Explaining the relationship between the systems analyst and user.
3. Identifying business organizational structure.
4. Describing the structure of an IT department.
5. Identifying key components of an information system.

Competency 2: The student will demonstrate knowledge of business processes by:

1. Identifying key business system stakeholders.
2. Explaining business system functionality and performance requirements.
3. Identifying business models.
4. Analyzing the impact of internet commerce issues.
5. Discussing the impact of enterprise systems.
6. Explaining the alignment of IT and business strategies.
7. Identifying the purpose of the strategic plan.
8. Describing how to research and understand specific corporate culture.

Competency 3: The student will demonstrate an understanding of the principles of information system management by:

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1. Analyzing how IT policies, procedures and methodologies support the strategic plan.
2. Identifying the infrastructure and its relationship to applications and user requirements.
3. Describing processes used to maintain organizational efficiencies and resources.
4. Researching service provider activities.

Competency 4: The student will demonstrate knowledge of system development, acquisition, and implementation by:

1. Explaining the purpose of the SDLC to business case studies.
2. Explaining the Preliminary Investigation for business case studies.
3. Analyzing User requirements using Interview and Questionnaire methodologies.
4. Identifying the input, process and output requirements.
5. Explaining a system implementation plan using software tools (PERT/CPM,Gantt charts).

Competency 5: The student will demonstrate an understanding of feasibility studies by:

1. Describing the types of feasibility.
2. Using current software tools to generate a candidate comparison grid.

Competency 6: The student will demonstrate an understanding of user design criteria by:

1. Explaining the benefits of relational database design.
2. Identifying the components of a database.
3. Explaining data warehousing and its benefits.
4. Analyzing screen and form design criteria.
5. Describing types of data relationships using Entity Relationship Diagrams (ERDs).

Competency 7: The student will demonstrate knowledge of documenting and reporting information systems requirements and components by:

1. Describing Unified Modeling Language (UML), modeling techniques and methods.
2. Analyzing a Functional Decision Diagram (FDD), Data Flow Diagram (DFD), and Use Case diagram for a Business Case.
3. Explaining Object Modeling and creating a class diagram.
4. Presenting findings in written, slide, and oral presentation formats.

Competency 8: The student will demonstrate an understanding of Cost-Benefit Analysis by:

1. Explaining cost-benefit analysis.
2. Explaining the purpose of return on investment (ROI) analysis to determine candidate feasibility.
3. Explaining Payback Analysis to determine candidate feasibility.
4. Describing discretionary costs.
5. Describing nondiscretionary costs.
6. Using Net Present Value (NPV) analysis to determine candidate feasibility.

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