

## IS 316 Computer Sys Analys & Design II

McGinnis, Jacob

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**Mission Statement:** The mission of Park University, an entrepreneurial institution of learning, is to provide access to academic excellence, which will prepare learners to think critically, communicate effectively and engage in lifelong learning while serving a global community.

**Vision Statement:** Park University will be a renowned international leader in providing innovative educational opportunities for learners within the global society.

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<b>Course</b>	IS 315 Computer Sys Analysis & Design II
<b>Semester</b>	Portfolio
<b>Faculty</b>	McGinnis, Jacob
<b>Title</b>	Senior Instructor
<b>Degrees/Certificates</b>	BS Electricity/Electronics MS Industrial Management Cisco CCSI 94-100
<b>Daytime Phone</b>	(816) 363-1241
<b>Other Phone</b>	(816) 665-5068 cell
<b>E-Mail</b>	<a href="mailto:jacob.mcginnis@park.edu">jacob.mcginnis@park.edu</a> <a href="mailto:chipmckcmo@aol.com">chipmckcmo@aol.com</a>
<b>Class Days</b>	TBA
<b>Class Time</b>	TBA
<b>Credit Hours</b>	3

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### **Textbook:**

Whitten, Bently and Dittman. Systems Analysis and Design Methods, 7th Ed. Irwin/McGraw Hill. ISBN: 0-07-305233-5

Textbooks can be purchased through the [MBS bookstore](#)

Textbooks can be purchased through the [Parkville Bookstore](#)

### **Additional Resources:**

[McAfee Memorial Library](#) - Online information, links, electronic databases and the Online catalog. Contact the library for further assistance [via email](#) or at 800-270-4347.

[Career Counseling](#) - The Career Development Center (CDC) provides services for all stages of career development. The mission of the CDC is to provide the career planning tools to ensure a lifetime of career success.

[Park Helpdesk](#) - If you have forgotten your OPEN ID or Password, or need assistance with your PirateMail account, please email [helpdesk@park.edu](mailto:helpdesk@park.edu) or call 800-927-3024

[Resources for Current Students](#) - A great place to look for all kinds of information <http://www.park.edu/Current/>.

### **Course Description:**

Continuation of [IS315](#). The student will continue to study the concepts and methods used in a system development life cycle. In addition, the student will gain practical experience by working on various projects. The student will use a CASE tool for his/her project work. 3:0:3

Prerequisite: [IS315](#)

**Educational Philosophy:**

The instructor's philosophy is one of enlisting student participation and interaction based on real life experiences and situations. The instructor will engage students in information exchanges and situational exploration and discussion. Team activities are highly encouraged and case exercises are a big part of this class.

**Learning Outcomes:****Core Learning Outcomes**

1. Distinguish logical versus physical models and translate logical process and data models into physical design models using design/ CASE software.
2. Evaluate and make architectural design decisions given a problem scenario: Client Server, Centralized versus Decentralized, Database and distribution of data, User and system interface alternatives (inputs/outputs)
3. Explain design principles for Input/Output with regard to human interaction and user acceptability.
4. Explain advantages and disadvantages of data storage options (i.e. Relational Database, Object Database, Conventional Files and Data Warehouse)
5. Practice key concepts of analysis and design as well as advance techniques such as JAD, Prototyping, USE CASES and/or other OOA/OOD techniques.
6. Evaluate strengths/weaknesses and applicable roles of several strategies/methodologies for design of information systems including Model Driven, RAD, Agile, OO development, and Prototyping.
7. Apply Quality Assurance steps that can be taken in all phases of development to ensure a quality product and user acceptance.
8. Communicate both orally and in writing as an individual and as a member of a team.

**Core Assessment:**

All Park University courses must include a core assessment that measures the relevant Departmental Learning Outcomes. The purpose of this assessment is to determine if expectations have been met concerning mastery of learning outcomes across all instructional modalities. *The core assessment for this course is a final exam which counts for 20% of the grade.* Questions on the final exam will be developed to test at least eight of the ten course core objectives.

[Link to Class Rubric](#)

**Class Assessment:**

The class will consist of course exams, several team based class presentations and information gathering activities. Several Case Tools will be discussed in detail during class period number 1, including Popkin System Architect and Visio Enterprise. Students will be shown a demonstration and be able to practice their skills utilizing an available Case Tool.

**Academic Honesty:**

Academic integrity is the foundation of the academic community. Because each student has the primary responsibility for being academically honest, students are advised to read and understand all sections of this policy relating to standards of conduct and academic life. [Park University 2007-2008 Undergraduate Catalog Page 85-86](#)

**Plagiarism:**

Plagiarism involves the use of quotations without quotation marks, the use of quotations without indication of the source, the use of another's idea without acknowledging the source, the submission of a paper, laboratory report, project, or class assignment (any portion of such) prepared by another person, or incorrect paraphrasing. [Park University 2007-2008 Undergraduate Catalog](#) Page 85

**Attendance Policy:**

Instructors are required to maintain attendance records and to report absences via the online attendance reporting system.

1. The instructor may excuse absences for valid reasons, but missed work must be made up within the semester/term of enrollment.
2. Work missed through unexcused absences must also be made up within the semester/term of enrollment.
3. Work missed through unexcused absences must also be made up within the semester/term of enrollment, but unexcused absences may carry further penalties.
4. In the event of two consecutive weeks of unexcused absences in a semester/term of enrollment, the student will be administratively withdrawn, resulting in a grade of "F".
5. A "Contract for Incomplete" will not be issued to a student who has unexcused or excessive absences recorded for a course.
6. Students receiving Military Tuition Assistance or Veterans Administration educational benefits must not exceed three unexcused absences in the semester/term of enrollment. Excessive absences will be reported to the appropriate agency and may result in a monetary penalty to the student.
7. Report of a "F" grade (attendance or academic) resulting from excessive absence for those students who are receiving financial assistance from agencies not mentioned in item 5 above will be reported to the appropriate agency.

[Park University 2007-2008 Undergraduate Catalog](#) Page 87-88

**Disability Guidelines:**

Park University is committed to meeting the needs of all students that meet the criteria for special assistance. These guidelines are designed to supply directions to students concerning the information necessary to accomplish this goal. It is Park University's policy to comply fully with federal and state law, including Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, regarding students with disabilities. In the case of any inconsistency between these guidelines and federal and/or state law, the provisions of the law will apply. Additional information concerning Park University's policies and procedures related to disability can be found on the Park University web page:

<http://www.park.edu/disability> .

## Rubric

Competency	Exceeds Expectation (3)	Meets Expectation (2)	Does Not Meet Expectation (1)	No Evidence (0)
<b>Synthesis</b>  Outcomes 2, 7	The artifact demonstrates the student ability to creatively apply prior knowledge and skills to produce an original narrative. Synthesis is demonstrated by correctly answering 2 out of 2 questions regarding: (a) managing changes to system requirements (b) comparison of a system analysis and design methodology to an information system.	The artifact demonstrates the student ability to creatively apply prior knowledge and skills to produce an original narrative. Synthesis is demonstrated by correctly answering 1 out of 2 questions regarding: (a) managing changes to system requirements (b) comparison of a system analysis and design methodology to an information system.	The artifact demonstrates the student ability to creatively apply prior knowledge and skills to produce an original narrative. Synthesis is demonstrated by correctly answering 0 out of 2 questions regarding: (a) managing changes to system requirements (b) comparison of a system analysis and design methodology to an information system.	The artifact demonstrates the student ability to creatively apply prior knowledge and skills to produce an original narrative. Synthesis is not demonstrated by answering any regarding: (a) managing changes to system requirements (b) comparison of a system analysis and design methodology to an information system.
<b>Analysis</b>  Outcomes 1,	The artifact demonstrates the student ability to differentiate information in an organizational structure. Analysis is demonstrated by correctly answering 2 out of 2 questions regarding: (a) methods of showing results of analyzing requirement dependencies (b) example showing results of analyzing requirements dependencies	The artifact demonstrates the student ability to differentiate information in an organizational structure. Analysis is demonstrated by correctly answering 1 out of 2 questions regarding: (a) methods of showing results of analyzing requirement dependencies (b) example showing results of analyzing requirements dependencies	The artifact demonstrates the student ability to differentiate information in an organizational structure. Analysis is demonstrated by correctly answering 0 out of 2 questions regarding: (a) methods of showing results of analyzing requirement dependencies (b) example showing results of analyzing requirements dependencies	The artifact demonstrates the student ability to differentiate information in an organizational structure. Analysis is not demonstrated by not answering any questions regarding: (a) methods of showing results of analyzing requirement dependencies (b) example showing results of analyzing requirements dependencies
<b>Evaluation</b>	The artifact	The artifact	The artifact	The artifact

<p>Outcomes 2, 3</p>	<p>demonstrates the student ability to judge relative value of information based on prior knowledge. Evaluation is demonstrated by correctly answering 2 out of 2 questions regarding: (a) reasons for involving individuals with various view points in system analysis and design (b) benefits of using a system analysis and design methodology in system maintenance</p>	<p>demonstrates the student ability to judge relative value of information based on prior knowledge. Evaluation is demonstrated by correctly answering 1 out of 2 questions regarding: (a) reasons for involving individuals with various view points in system analysis and design (b) benefits of using a system analysis and design methodology in system maintenance</p>	<p>demonstrates the student ability to judge relative value of information based on prior knowledge. Evaluation is demonstrated by correctly answering 0 out of 2 questions regarding: (a) reasons for involving individuals with various view points in system analysis and design (b) benefits of using a system analysis and design methodology in system maintenance</p>	<p>demonstrates the student ability to judge relative value of information based on prior knowledge. Evaluation is not demonstrated by correctly answering questions regarding: (a) reasons for involving individuals with various view points in system analysis and design (b) benefits of using a system analysis and design methodology in system maintenance</p>
<p><b>Terminology</b></p> <p>Outcomes 1, 2</p>	<p>The artifact demonstrates the student ability to proficiently use terminology related to specific course area. Use of terminology is demonstrated by correctly answering 2 out of 2 questions regarding (a) automation of systems analysis and design processes (b) characteristics of a systems analysis methodology.</p>	<p>The artifact demonstrates the student ability to proficiently use terminology related to specific course area. Use of terminology is demonstrated by correctly answering 1 out of 2 questions regarding (a) automation of systems analysis and design processes (b) characteristics of a systems analysis methodology.</p>	<p>The artifact demonstrates the student ability to proficiently use terminology related to specific course area. Use of terminology is demonstrated by correctly answering 0 out of 2 questions regarding (a) automation of systems analysis and design processes (b) characteristics of a systems analysis methodology.</p>	<p>The artifact demonstrates the student ability to proficiently use terminology related to specific course area. Use of terminology is not demonstrated by answering any questions regarding (a) automation of systems analysis and design processes (b) characteristics of a systems analysis methodology.</p>
<p><b>Concepts</b></p> <p>Outcomes 4, 7</p>	<p>The artifact demonstrates student ability to recognize and articulate concepts relevant to core</p>	<p>The artifact demonstrates student ability to recognize and articulate concepts relevant to core</p>	<p>The artifact demonstrates student ability to recognize and articulate concepts relevant to core</p>	<p>The artifact demonstrates student ability to recognize and articulate concepts relevant to core</p>

	course topics. Recognition and articulation is demonstrated by correctly answering 2 out of 2 questions regarding: (a) failures in implementing a system (b) common issues with data security	course topics. Recognition and articulation is demonstrated by correctly answering 1 out of 2 questions regarding: (a) failures in implementing a system (b) common issues with data security	course topics. Recognition and articulation is demonstrated by correctly answering 0 out of 2 questions regarding: (a) failures in implementing a system (b) common issues with data security	course topics. Recognition and articulation is not demonstrated by correctly answering any questions regarding: (a) failures in implementing a system (b) common issues with data security
<b>Application</b>	The artifact demonstrates student ability to use principles as they relate to core course topics. Application is demonstrated by correctly answering 2 out of 2 questions regarding: (a) use of multiple models in system analysis and design (b) system design to support maintenance.	The artifact demonstrates student ability to use principles as they relate to core course topics. Application is demonstrated by correctly answering 1 out of 2 questions regarding: (a) use of multiple models in system analysis and design (b) system design to support maintenance	The artifact demonstrates student ability to use principles as they relate to core course topics. Application is demonstrated by correctly answering 0 out of 2 questions regarding: (a) use of multiple models in system analysis and design (b) system design to support maintenance	The artifact demonstrates student ability to use principles as they relate to core course topics. Application is not demonstrated by answering questions regarding: (a) use of multiple models in system analysis and design (b) system design to support maintenance
<b>Whole Artifact</b>	The artifact demonstrates student ability to use accepted methods and standards in performing system analysis and design activities. Ability is demonstrated by correctly answering 2 out of 2 questions regarding: (a) computer aided software engineering (CASE) tool functions (b) key	The artifact demonstrates student ability to use accepted methods and standards in performing system analysis and design activities. Ability is demonstrated by correctly answering 1 out of 2 questions regarding: (a) computer aided software engineering (CASE) tool functions (b) key	The artifact demonstrates student ability to use accepted methods and standards in performing system analysis and design activities. Ability is demonstrated by correctly answering 0 out of 2 questions regarding: (a) computer aided software engineering (CASE) tool functions (b) key	The artifact demonstrates student ability to use accepted methods and standards in performing system analysis and design activities. Ability is not demonstrated by answering any questions regarding: (a) computer aided software engineering (CASE) tool functions (b) key activities in system

	activities in system analysis and design	activities in system analysis and design	activities in system analysis and design	analysis and design
<b>Component</b>	The artifact demonstrates student ability to use accepted methods and standards in performing specific system analysis and design activities. Ability is demonstrated by correctly answering 2 out of 2 questions regarding: (a) system analysis activities supported by computer aided software engineering (CASE) tools (b) testing activities in phases of the system development life cycle	The artifact demonstrates student ability to use accepted methods and standards in performing specific system analysis and design activities. Ability is demonstrated by correctly answering 1 out of 2 questions regarding: (a) system analysis activities supported by computer aided software engineering (CASE) tools (b) testing activities in phases of the system development life cycle	The artifact demonstrates student ability to use accepted methods and standards in performing specific system analysis and design activities. Ability is demonstrated by correctly answering 0 out of 2 questions regarding: (a) system analysis activities supported by computer aided software engineering (CASE) tools (b) testing activities in phases of the system development life cycle	The artifact demonstrates student ability to use accepted methods and standards in performing specific system analysis and design activities. Ability is not demonstrated answering any questions regarding: (a) system analysis activities supported by computer aided software engineering (CASE) tools (b) testing activities in phases of the system development life cycle
Outcomes 6, 7				
<b>Relationship</b>	The artifact demonstrates student ability to articulate and communicate activities and results of systems analysis and design, Ability is demonstrated by correctly answering 2 out of 2 questions regarding: (a) interfaces between a computer systems and stakeholders internal and external to the organization (b)	The artifact demonstrates student ability to articulate and communicate activities and results of systems analysis and design, Ability is demonstrated by correctly answering 1 out of 2 questions regarding: (a) interfaces between a computer systems and stakeholders internal and external to the organization (b)	The artifact demonstrates student ability to articulate and communicate activities and results of systems analysis and design, Ability is demonstrated by correctly answering 0 out of 2 questions regarding: (a) interfaces between a computer systems and stakeholders internal and external to the organization (b)	The artifact demonstrates student ability to articulate and communicate activities and results of systems analysis and design, Ability is demonstrated by not answering any questions regarding: (a) interfaces between a computer systems and stakeholders internal and external to the organization (b) interfaces between
Outcomes 8				

	interfaces between a computer system and other systems internal and external to the organization.	interfaces between a computer system and other system internal and external to the organization.	interfaces between a computer system and other systems internal and external to the organization.	a computer systems and other system internal and external to the organization.
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