INSTRUCTOR

<table>
<thead>
<tr>
<th>Name</th>
<th>A. C. Shah</th>
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<tbody>
<tr>
<td>Office</td>
<td>N/A</td>
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<td>(229) 931-2100</td>
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<tr>
<td>Class Hours</td>
<td>Online</td>
</tr>
<tr>
<td>Room</td>
<td>N/A</td>
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<tr>
<td>Office Hours</td>
<td>By email</td>
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TEXTBOOK

<table>
<thead>
<tr>
<th>Title</th>
<th>System Analysis and Design, 9th. Edition</th>
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<tbody>
<tr>
<td>Author(s)</td>
<td>Kenneth Kendall and Julie Kendall</td>
</tr>
<tr>
<td>Publisher</td>
<td>Published by Prentice Hall</td>
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REQUIREMENTS

You are expected to have following environment to progress smoothly and successfully in the course:

- A laptop/desktop computer with Windows Operating System
- Reliable Internet access using browsers such as Explorer 6.0 or higher and Firefox 2.0, Java installed, and pop-up blocker turned off.
- Microsoft Office 2010/2013 (Must include Word, Excel, Access, and PowerPoint) installed on your laptop
- Access to the GeorgiaVIEW to go to the course resources.
- You must have TEXTBOOK (mentioned above)
- Storage Devices: You must have one 500 MB (or higher) USB Portable Storage Device

Software used in this class:

- Visible Analyst – for DFD and system documentation

GAVIEW SUPPORT

From GSW website at [http://www.gsu.edu](http://www.gsu.edu) click on link for GeorgiaView at the bottom of the page. You will see a page of Welcome to GeorgiaView@ GSW. Click on [Click here to log in to GeorgiaVIEW](http://www.gsu.edu). Enter your Username and Password and then click OK.
Your user name is the radar email name (everything before @ sign) and the password will be your RAIN PIN.

For more information on GeorgiaVIEW please visit - http://www.gsw.edu/~gaview/

When logged successfully, you will see the courses to which you have access in GeorgiaVIEW. Identify the SAD Course (CIS 3300 – System analysis and Design – I - 01). Click on the course link to go to the course website.

**CATALOG DESCRIPTION**

This course provides the students with an introduction to technical and management issues in systems analysis and design. The course covers various issues such as the SDLC model, CASE tools, the systems analyst and the different roles of a systems analyst in an organization. It introduces students to various information gathering techniques, tools for project management, CPM, PERT charts, issues and models for sampling data sources, ER diagrams, data flow diagrams and data dictionaries. It includes an in-depth treatment of prototyping, the role of the user in prototyping and other issues related to prototyping.

(3-0-3) Prerequisites: CSCI 1301 or CSC 220

**GOALS**

The course prepares students in areas such as system study, analysis, requirement determination, interviewing techniques, and prototyping. Also use of system design tools (such as Visible Analyst) to document the system from the beginning.

**OBJECTIVES**

- Learn the fundamental concepts in system design.
- Learn the techniques of system requirement determination.
- Learn the system design CASE tool software.

**LEARNING OUTCOMES**

Upon completion of the course students will be able to
1. Differentiate between different types of information systems
2. Work in different capacities as systems analyst
3. Do feasibility, detail system study, analysis and prepare a system proposal
4. Use combination of techniques of requirement determination, analysis, and document requirements
5. Develop skill in team working
6. Use CASE tools for modeling a system

**EVALUATION**

| Assignments | 40 % |
| Tests       | 60 % |
GRADING POLICY

<table>
<thead>
<tr>
<th>Marks</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90 - 100</td>
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<tr>
<td>80 - 89</td>
<td>B</td>
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<td>70 - 79</td>
<td>C</td>
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<tr>
<td>60 - 69</td>
<td>D</td>
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<tr>
<td>Less than 60</td>
<td>F</td>
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COURSE OUTLINE

1. Systems, Roles, and Development Methodologies
   1.1. Types of systems
   1.2. Need for SAD
   1.3. Roles of Systems Analyst
   1.4. Case Tools

2. Understanding and Modeling Organizational Systems
   2.1. Organizations as Systems
   2.2. Graphical representation of system
   2.3. Level of Management
   2.4. Organizational culture

3. Project Management
   3.1. Project initiation
   3.2. Determining feasibility
   3.3. Activity Planning and control – use CASE tool
   3.4. Managing Project
   3.5. The System Proposal

4. Information Gathering – Interactive Methods
   4.1. Interviewing
   4.2. Joint Application Design
   4.3. Using Questionnaires

5. Information Gathering – Unobtrusive Methods
   5.1. Sampling
   5.2. Investigation
   5.3. Observing decision makers behavior
   5.4. Observing physical environment

6. Agile Methods and Prototyping
   6.1. Approach to Prototyping
   6.2. Developing prototype
   6.3. User’s role in prototyping
6.4 Rapid Application Development

7. Using Data Flow Diagrams
   7.1 Why DFD
   7.2 Developing DFD - Levels of DFD
   7.3 Logical and Physical DFD
   7.4 Creating DFD

8. Analyzing systems using data dictionaries
   8.1 The data dictionary
   8.2 The data repository
   8.3 Creating data dictionary
   8.4 using data dictionary

   9.1 Process specifications
   9.2 Process specification format
      Structured English
      Decision Tables
      Decision Trees
   9.3 Choosing Structured Decision Analysis Technique