CIS 248 Advanced Application Development
Course Syllabus

COURSE: **CIS 248 Advanced Application Development**
CREDIT: 4 Credits

INSTRUCTOR: Gary Kappenman
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SCHOOL: Southeast Technical Institute
ADDRESS: 2320 N. Career Ave
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PREREQUISITE: Prior completion of at least one advanced programming class

DESCRIPTION: This course is designed to provide students with real world project design experience as an alternative to an internship. Each student, working individually or in a team of up to three students, will develop an entire project starting with an analysis of the proposed system and concluding with installation and testing. Students will gain experience with system analysis and design by discussions of the systems development life cycle with emphasis on analysis, data flow diagrams, selection of design tools, creation of the project schedule, project budgeting, prototyping, proposals, user feedback, test procedures, and software release procedures. Students will track their time in relation to various project tasks, submit weekly status reports, and make presentations on their projects during the semester.

REQUIRED TEXT: Essentials of System Analysis & Design, Fifth Edition
                    By Valacich – George – Hoffer (ISBN: 0-13-706711-9)

COMPETENCIES: The student should have the following skills upon successful completion of this course:

- An understanding of the Systems Development Life Cycle (SDLC) and how to apply it to the planning, selection, design and implementation of a software development project they develop either individually or in teams of up to three students

- An understanding of project planning and project selection activities including a general understanding of when an organization should develop an IT application vs. when it should acquire the application

- An understanding of user requirements as they relate to an IT project and how to determine and document the requirements

- The ability to create Gantt charts, Project Status Reports, and Time Sheets and to use them to plan and track progress on projects

- The ability to create Data Flow Diagrams (DFDs) and to utilize them in the project design process

- A basic understanding of software application test and implementation procedures

- An understanding of application software documentation requirements including the actual creation of both a user manual and a technical manual for their projects

BASIS FOR EVALUATION: *Final project (50% of grade) –* A working final project is expected to be at least prototyped (preferably completed) by the end of the semester. The project grade will include measures of the level of difficulty and professionalism of the design effort, the design of the application, the actual working project prototype, and the documentation developed by the student for the project.

Weekly status reports (25% of grade) – The weekly status reports describe the progress made on each project each week and include a time sheet which tracks the total accumulated time on the project. They will be due at the end of each Wednesday's class period starting the 2nd week of class. Late status reports will not be accepted unless mutually agreed to and scheduled on or before the due date.

Exams & Quizzes (25% of unit grade) – Four exams will be given after major topics.   Exams will be announced ahead of time. Make-up exams are not available unless mutually agreed to and scheduled BEFORE the related test date. Exams will be closed book without access to the Internet. Questions may consist of short-answer, multiple choice, true/false, logic questions, fill-in-the-blank, and matching exercises.

GRADING

Grades will be earned on a point system, and will be determined by using the following formula:
$$(PointsEarned - Deductions) / PointsPossible$$
The grading scale is as follows:

A+ = 99 to 100	A = 94 to 98.99	A- = 89.5 to 93.99
B+ = 89 to 89.49	B = 84 to 88.99	B- = 79.5 to 83.99
C+ = 79 to 79.49	C = 74 to 78.99	C- = 69.5 to 73.99
D = 63 to 69.49	D- = 59.5 to 62.99	F = 0 to 59.49

The +/- designators are not used to calculate Grade Point Average (GPA) on STI transcripts

STUDENT RESPONSIBILITY

It is the student's responsibility to be an active participant in class. Integrity and professional work ethics will be demonstrated by the instructor and required from the students. Excessive misuse of the computer resource will result in disciplinary action. Please refer to your Student Handbook for more details. Cheating and plagiarism will result in a zero for that work. Further unethical behavior will result in a failing grade for the course. [*]

Violations of safety to self and others and/or violation of safe operating practices of equipment may result in: the reduction or loss of your daily grade; removal from class; and/or other disciplinary action.

The instructors and the faculty members in this course will act with integrity and strive to engage in equitable verbal and nonverbal behavior with respect to differences arising from age, gender, race, handicapping conditions and religion. If you have special needs as addressed by the American with Disabilities Act and need course materials in alternative formats, notify your instructor immediately. Reasonable efforts will be made to accommodate your special needs.

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[*]Refer to your SETI Student Handbook for additional school policies.

STUDENT SUCCESS

Student success is important to our faculty, and all faculty are involved in assessing learning. Upon completion of a degree, Southeast graduates will have demonstrated competence in the following areas:

Science and Technology: Technical competence including knowledge of technology and/or scientific principles as these apply to programs.

Problem Solving & Critical Thinking: The ability to select and use various approaches to solve a wide variety of problems – scientific, mathematical, social and personal. Graduates will also be able to evaluate information from a variety of perspectives, analyze data, and make appropriate judgments.

Communication: The ability to communicate effectively in several forms – oral, written, nonverbal and interpersonal. Graduates will also demonstrate knowledge of how to manage and access information.

Professionalism: Strong work ethic, including responsible attendance; skill in teamwork and collaboration, as well as an ability to work with others, respecting diversity; ability to adapt to change; commitment to lifelong learning; adherence to professional standards; and positive self-esteem and integrity.