COURSE SYLLABUS

COLLEGE OF BUSINESS

FALL SEMESTER, 2019

CIS 476-01

ENTERPRISE ARCHITECTURE

INSTRUCTOR:	Jason Watson, Ph.D. Assistant Professor Department of Computer Science and Information Systems
OFFICE HOURS:	Monday-Wednesday 8:30 - 9:30 a.m. Thursday 8:30 a.m. - 12:30 p.m. Additional hours by appointment.
OFFICE LOCATION:	Keller Hall, 2nd Floor, Office #248
OFFICE TELEPHONE:	256-765-4689 (please leave message)
E-MAIL:	Canvas CIS 476-01 Course Inbox (preferred) UNA Portal: jwatson5@una.edu (emergency)
FAX:	256-765-4811 (CSIS Department Office)
CLASS HOMEPAGE:	Go to www.una.edu . At the top of the webpage, click the Canvas hyperlink (or you may go directly to https://una.instructure.com/login/ldap). Sign in to Canvas using your UNAPortal username and password. On your Dashboard, click CIS 476-01.
CLASS LOCATION:	Raburn 210
COURSE TIME:	Monday/Wednesday 9:30 p.m. - 10:45 a.m.

COURSE DESCRIPTION:	A study of the design, implementation, and management of enterprise information systems. The course focuses on the development, maintenance, and management of systems that support business processes. Students are exposed to a wide range of tools, standards, and topics such as security, ethics, system administration, distributed computing, middleware, multi-tier architectures, interoperability, legacy system integration and emerging technologies. Agile software engineering methodologies, tools, and techniques are discussed and employed.
SECTION NUMBER:	01
CREDIT HOURS:	3
PREREQUISITE:	CIS 315 or CS 255, CIS 376 or CS 325, CIS 344 or CS 360

COURSE DELIVERY METHOD: Traditional Classroom

COURSE OBJECTIVES:

The student will be able to:

1. Support various codes of ethics and understand how to address ethical dilemmas.
2. Manage and support e-business projects.
3. Remain current with state-of-the-art e-business technologies.

TOPICS COVERED:

- Client/server architecture
- Web servers, HTTP, CGI/Perl
- PHP form processing
- Cookies, sessions, and state management
- Database/PHP Integration using MariaDB
- Ciphers and cryptology
- AJAX and web data standards
- Tomcat, Java Enterprise Edition, declarative web security and SSL
- PHP Secure Authentication and Authorization
- .NET, Desktop Applications, Event-driven programming, VB, C#, C++
- Web Crawlers and Search Engine Optimization

- Software configuration management using Git
- XML Web services and Service-Oriented Architecture using SOAP
- RESTful Web Services and Microservice Architecture
- Ruby on Rails
- js, and the MEAN architecture
- ERP
- Mobile Platforms
- Test Driven Development and Refactoring
- DevOps, Docker and Continuous Integration
- Big Data and Data Analytics
- Blockchain and Cryptocurrencies
- Machine Learning
- Emerging Technologies
- The Concept of Enterprise Architecture
- Metacognition
- Software Engineering
- Study of Ethics Codes
- Requirements Gathering & Use Cases
- Ethics & Technological Dilemmas
- UML & The UP
- The Agile Manifesto
- Scrum & XP
- Estimation
- Management, Support & Development Environments
- Threat Modeling
- Cloud Computing
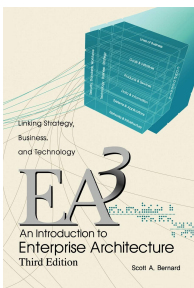- Comparison of Enterprise Architectures
- Pragmatic Thinking & Learning

COURSE EVALUATION PROCESS (Grade Components):

Subject exams (2 exams @ 15% each)..30%
Weekly Quizzes 15%
Project work...35%
Final exam...20%

Final grades will be assigned on the basis of the following grading scale:

90 to 100%	A
80 to 89%	B
70 to 79%	C
60 to 69%	D
Below 60%	F

REQUIRED TEXTBOOK, SOFTWARE, AND SUPPLIES:

Textbook: Bernard, S. A. (2012). An Introduction to Enterprise Architecture, 3rd Edition. AuthorHouse. ISBN-10: 1477258000. ISBN13: 978-1477258002.

IMPORTANT TECHNICAL SUPPORT CONTACT INFORMATION:

UNA Technical Support:

- Canvas Support: Click the Help icon on your navigation menu and then click Report a Problem to submit a ticket to Canvas Tech Support. If you cannot log-in to Canvas, then please e-mail UNA Information Technology Services (ITS) Support at helpdesk@una.edu . In this email, include your full name, UNA email address, an alternative email address (if applicable), and a phone number where you can be reached.
- Canvas FAQ: www.una.edu/distance/help/canvas.html .
- UNAPortal FAQ: www.una.edu/faq/ .
- UNA Information Technology Services Support: helpdesk@una.edu (from your UNA portal e-mail if possible).

ACADEMIC HONESTY–UNIVERSITY POLICY:

Students are expected to be honorable and observe standards of conduct appropriate to a community of scholars. Additionally, students are expected to behave in an ethical manner. Individuals who disregard the core values of truth and honesty bring disrespect to themselves and the University. A university community that allows academic dishonesty will suffer harm to the reputation of students, faculty and graduates. It is in the best interest of the entire university community to sanction any individual who chooses not to accept the principles of academic honesty by committing acts such as cheating, plagiarism, or misrepresentation. Offenses are reported to the Vice President for Academic Affairs and Provost for referral to the University Student Discipline System for disposition. The Academic Dishonesty Incident Report form may be viewed at https://www.una.edu/student-conduct/docs/Academic%20Honesty%20PolicyAcademic%20Honesty%20Incident%20Form.pdf .

STUDENTS WITH DISABILITIES–UNIVERSITY POLICY:

In accordance with the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973, the University offers reasonable accommodations to students with eligible documented learning, physical and/or psychological disabilities. Under Title II of the Americans with Disabilities Act (ADA) of 1990, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Amendment Act of 2008, a disability is defined as a physical or mental impairment that substantially limits one or more major life activities as compared to an average person in the population. It is the responsibility of the student to contact Disability Support Services to initiate the process to develop an accommodation plan. This accommodation plan will not be applied retroactively. Appropriate, reasonable accommodations will be made to allow each student to meet course requirements, but no fundamental or substantial alteration of academic standards will be made. Students needing assistance should contact Disability Support Services. Complete guidelines and requirements for documentation can be found on the DSS web pages at https://www.una.edu/disability-support .

INFORMATION TECHNOLOGY ACCEPTABLE USE–UNIVERSITY POLICY

This acceptable use statement governs the use of computers, networks, and other information technologies at the University of North Alabama. This statement applies to all students and employees of the University, and to all other persons who may legally or illegally use or attempt to use a computer resource owned by the University, and/or is connected by any means to the campus computing network. As a user of these resources, you are responsible for reading and understanding this document. To view the entire Information Technologies Acceptable Use Statement, please see https://www.una.edu/its/una-it-policy.html .

WITHDRAWAL FROM A COURSE–UNIVERSITY POLICY:

During the W - Grade Withdrawal Period:
Students may withdraw online through their Portal Self-Service Registration account. Under Registration - Add/Drop Courses, select "Web Withdraw" in the Action drop down for the class. Then, click Submit.

During the WP/WF - Grade Withdrawal Period:
Students may request a withdraw from a class through their Portal Self-Service Registration account. Under Registration - Add/Drop Courses, select "Request a Withdraw" in the Action drop down for the class. Then, click Submit. The instructor of the course will be notified of the request, and if approved, he or she will assign a grade of WP or WF. Once the grade has been officially recorded, the student will receive notification that the withdrawal request has been approved and processed.

Withdrawing from a course before the deadline will not affect a student's GPA or academic standing. A notation of W, WP or WF is made on a student's transcript depending on the timing of course withdrawal. See Schedule of Classes for dates.

Students are strongly advised not to withdraw from courses unless absolutely necessary. **Students receiving Financial Aid** should check with the Student Financial Services before withdrawing from classes. Student progress toward degree completion is checked every semester for students

receiving federal grants and loans. Students must pass and complete 75% of all work attempted to maintain financial aid. **Student Athletes** should check with the Athletic Department as course withdrawal could affect eligibility for competition.

TITLE IX–UNIVERSITY POLICY

The University of North Alabama has an expectation of mutual respect. Students, staff, administrators, and faculty are entitled to a working environment and educational environment free of discriminatory harassment. This includes sexual violence, sexual harassment, domestic and intimate partner violence, stalking, gender-based discrimination, discrimination against pregnant and parenting students, and gender-based bullying and hazing.

Faculty and staff are required by federal law to report any observation of harassment (including online harassment) as well as any notice given by students or colleagues of any of the behaviors noted above. Retaliation against any person who reports discrimination or harassment is also prohibited. UNA's policies and regulations covering discrimination and harassment may be accessed at https://www.una.edu/titleix/ . If you have experienced or observed discrimination or harassment, confidential reporting resources can be found on the website or you may make a formal complaint by contacting the Title IX Coordinator at 256-765-4223.

UNA PORTAL–UNIVERSITY POLICY

The University of North Alabama's official communication vehicle is UNA Portal. You may access your UNA Portal email through the University's homepage at https://www.una.edu/ . The link to Portal is at the top of the page. It is important for students to read their UNA Portal e-mail on a regular basis for information regarding University deadlines, policies, and events. These messages are outside your Canvas courses and relate to ALL University communication. Please understand the importance of each communication vehicle and the distinction between the two.

COMMUNICATION AND NETIQUETTE–COLLEGE OF BUSINESS POLICY

Students are encouraged to communicate with their instructors throughout the semester. Please allow up to 48 hours for a reply to your email or phone messages. Correspondence received on Fridays and University Holidays will not be addressed until the next regularly scheduled business day at UNA. In circumstances where a longer response time is needed, faculty will notify the student.

- Email Communication: Please use the Canvas Inbox when possible. In case of emergencies use the following email address jwatson5@una.edu . This email should be sent from your UNA Portal email account, if possible.
- Phone Communication: When leaving a voicemail, leave your name, phone number, and message. Please speak slowly and clearly.
- Face-to-face Communication: You may drop by during posted office hours or you may email to request an appointment that is more convenient to your schedule.

When communicating in an online format (i.e., email, chat, discussions, etc.) please adhere to the standard rules of netiquette. The following summary is taken from https://www.education.

com/reference/article/netiquette-rules-behavior-internet/ .

- Identify yourself. Begin messages with a salutation and end them with your name.
- Include a subject line. Give a descriptive phrase in the subject line of the message header that tells the topic of the message.
- Avoid sarcasm. People who don't know you may misinterpret its meaning.
- Respect others' privacy. Do not quote or forward personal email without the original author's permission.
- Acknowledge and return messages promptly.
- Copy with caution. Don't copy everyone you know on each message.
- No spam (a.k.a. junk mail). Don't contribute to worthless information on the Internet by sending or responding to mass postings of chain letters, rumors, etc.
- Be concise. Keep messages concise–about one screen, as a rule of thumb.
- Use appropriate language. Avoid coarse, rough, or rude language. Observe good grammar and spelling.
- Use appropriate intensifiers to help convey meaning. Avoid "flaming" (online "screaming") or sentences typed in all caps. Use asterisks surrounding words to indicate italics used for emphasis.

ATTENDANCE AND PARTICIPATION

UNIVERSITY POLICY: Regular and punctual attendance at all scheduled classes and activities is expected of all students and is regarded as integral to course credit. Each student is directly responsible to the individual professor for absences and for making up work missed. Particular policies and procedures on absences and makeup work are established in writing for each class, are announced by the professor at the beginning of the term, and for excessive absences, may provide for appropriate penalties including reduction in grades or professor-initiated withdrawal from class. Official written excuses for absences are issued only for absences incurred in connection with university-sponsored activities. For all other types of group or individual absences, including illness, authorization or excuse is the province of the individual professor.

CSIS POLICY: Whenever a student's cumulative absences (or lack of course activity for online courses) for any reason–excused or unexcused–exceed the equivalent of three weeks of scheduled classes and activities (one week in each four-week session or two weeks in the eight week summer term), no credit may be earned for the course at the discretion of the professor.

INSTRUCTOR RESPONSE TIME

Exams will be graded automatically when submitted to the system. For other assignments, the instructor will under most circumstances complete grading of assignments within 1 week of submission.

MINIMUM TECHNOLOGY REQUIREMENTS

- A high-speed internet connection is recommended.

LATE ASSIGNMENTS

No makeups will be offered for the assignments portion of your grade.

MAKE-UP EXAMS

You must inform your instructor **prior to an exam** if you have to miss the exam. If the instructor determines that you have a valid excuse for missing the exam, a makeup exam will be scheduled within one week of the missed exam. If you do not contact your instructor within one week of the exam, you will receive a zero for the missed exam.

GRADES

Every effort will be made to treat each student equally. Students will be graded solely on course performance–not on unrelated factors.

All materials, projects, and tests submitted during the course become the property of the University.

QUESTIONS ABOUT GRADES

If you feel there is an error in the grading of your assignments and/or exams, you must contact your instructor within one week after the assignment/exam was graded. Your instructor will re-evaluate the assignment/exam and communicate with you the status of the re-evaluation. Inquiries made after a week has passed will not be re-evaluated.

STUDENT RESPONSIBILITY

You are responsible for the grade earned in this class. Your instructor is not responsible for your personal obligations, your maintaining a certain grade point average, or, for international students, ensuring that immigration requirements related to your continued enrollment at the university are met. It is important for students to communicate the need for support with course-related activities throughout the semester rather than only at the end of the semester after final course grades have been determined. The course evaluation guidelines will be uniformly applied, with no exceptions, to all students.