Guided Application in Information Technology and Industry Processes - Spring 2022

ITEC 3650 **Instructors:**Elizabeth Reves
Bruce Bauer
Thomas Wallace

Location & Time:

EIT 218 - 12:15pm - 2:55pm - T/TH Meets Virtually and Face to Face **Prerequisites:**

ITEC 3610 with of B or above

Faculty Contact Information

Bruce Bauer brucebauer.info blbauer@ualr.edu EIT 558
Elizabeth Reves web-projects.net/aereves/ aereves@ualr.edu EIT 539
Thomas Wallace thomaswallace.net tswallace@ualr.edu EIT 547

Course Materials

- Chromebook Provided by Program with Agreement.
- All required materials will be available via individual faculty websites.
- External / Cloud Storage 1GB Minimum (Google Drive works well).

Course Overview

There are three main components to the curriculum for ITEC 3650: technical skills, business concepts, and behavioral communication (soft skills). The technical component consists primarily of 1) information management, 2) web design/Internet applications and 3) applied JavaScript. The second component, business concepts, focuses on leadership and project management. The behavioral communication component emphasizes personal and professional growth with particular emphasis on meeting management and client relationships. Critical thinking skills, problem solving skills, and self-initiated learning are concepts that students must develop throughout all components of the IT Minor.

Technical Skills

Information Management

Students will know and understand the conceptual foundation of database management systems (DBMS), and be able to apply that foundation with cloud-based database software (MySQL). They will understand the purpose of and be able to create and customize tables, forms, queries, and reports. They will understand the various data types, the concept of referential integrity, and normalization. They will be able to look at a user's specifications to create a user friendly and workable database.

Programming (Applied JavaScript)

Students will learn to use JavaScript libraries and leverage them to create progressively enhanced site designs.

Students will also learn how to leverage JavaScript to access web-based APIs and transport data between websites and data sources.

Web Development and Design

Students will know how to create standards-based websites. They will understand user-centered design concepts and modern web accessibility practices. Skills in layout and graphical design will be coupled with methods for creating and optimizing imagery for the Web. Students will learn to read and write semantic html5 and to properly structure documents for the web. Students will explore and learn about modern Internet technologies and web-based services that can be integrated into their sites for a rich, usable experience for the end-user. Students will demonstrate mastery of the above skills by developing a web site for a client.

Business Concepts

Project Management

Students will understand the importance and learn the methodology of managing projects. They will be able to work as team members in project management to: define problems; research and collect possible solutions; select the preferred solution; develop an initial plan with goals, objectives, teams, rough budgets, and schedules for approval; develop a task list and assignments for development and implementation of the project.

Behavioral Communication (Soft Skills)

Technical skills alone are no guarantee of success. Non-technical skills are included in the IT Minor at the recommendation of the program's corporate partners. Technical skills must be integrated with excellent problem solving abilities, the ability to listen, the ability to function as a member of a team, and the ability to adapt to new technology and new languages.

Students continue to master the team and problem solving skills introduced in 3610 and develop a set of skills for effective meeting management including leading and participating in meetings; understanding company culture; designing questions to gain needed information; establishing and nurturing client relationships; effective presentations incorporating technology; verbal and written communication; personal organization; and coaching for result.

Course Relationship to ABET Curriculum

This course teaches students techniques, skills, and tools necessary for computing practice. It will also introduce students to local and global impacts of computing solutions on individuals, organizations, and society

Course Relationship to ABET Student Outcomes

This course will help students to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to

- identify solutions.
- 2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
- 3. Communicate effectively in a variety of professional contexts.
- 4. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
- 5. Support the delivery, use, and management of information systems within an information systems environment.

Attendance

Attendance is critical in mastering the course material. If you must miss class, please send an email to the program faculty before class begins explaining the reason for your absence. Participation implies making comments, observations, and contributions and asking questions in the virtual and/or physical classroom. Excessive unexcused absences will negatively affect your participation grade. Due to COVID-19 content will be delivered in a hybrid format. All sessions will be offered online, with the understanding that there will be opportunities for face to face interaction as health and safety permits. Students who wish to complete the entire course in an online environment due to health and safety concerns will be given the option to complete the course in its entirety online with instructor approval. We will be using Blackboard Collaborate for online class meetings and individual meeting requests will be handled via Google Meet. Students are expected to attend lectures online at the regularly scheduled times and participate throughout the duration of the session. If attendance on a particular day is not possible, students should email the Instructors prior to class to make alternate plans for completion of that day's content.

Grading

Your grade will be based on these areas:

25% - Programming (15% Assignments | 10% Assessment)

25% - Web Design (15% Assignments | 10% Assessment)

25% - Team Project & Evaluation

25% - Soft Skills*

* Soft skills Includes participation, in class discussions, demonstration of questioning and listening skills, team participation and leadership, attendance, oral presentations, reflective writing, and other components as assigned.

Grading Scale:

A (Above Mastery)	100% – 90%
B (Mastery)	80% – 89%
С	70% - 79%
D	60% - 69%
F	Below 60%

Policy for Late/Missed Work

Students are expected to turn in all assignments on time. Failure to do so will result in reduced or no credit for the assignment. Only in the case of extenuating circumstances will an extension be granted.

Caution:

- Only assignments completed and turned in by deadlines will be considered for Above Mastery (A). Once an
 assignment is submitted, it is graded and returned. If an assignment needs corrections, those instructions will be
 given and the grade will remain pending until corrections are complete. The instructions will also include a
 deadline for submission.
- There will be a grade penalty for submitting assignments in stages (unless assigned that way) or submitting the same assignment multiple times. Submit only the work you want graded.
- Plan ahead for problems with emailing assignments.
- Due to the cumulative nature of the course content only students who have received a grade of B or higher will be eligible to register for ITEC 4610 the following semester.

Office Hours and Instructor Presence

Your success in this course is important to us. We will be available to meet virtually at the following times:

Bruce Bauer

Monday/Wednesday – 11:30an–1:30pm | **Tuesday/Thursday** – 9:00am –11:00am | **Friday** – By appointment To schedule an appointment, visit <u>Bruce Bauer Appointment Calendar</u> or please email at <u>blbauer@ualr.edu</u>.

Elizabeth Reves

MWF 10:00 AM - Noon in Ross Hall 120, OR TR 10:30 - noon in EIT 539

Use <u>Calendly</u> to schedule a 30 minute appointment via phone, Zoom, or in person during office hours (with mask and social distancing).

aereves@ualr.edu

Thomas Wallace

Monday/Wednesday – 9:00am – Noon | **Tuesday/Thursday** – 11:00am – Noon | **Friday** – 9:00am – Noon To schedule an appointment please email at tswallace@ualr.edu.

All course content will be delivered during the scheduled classroom sessions by the Instructor, except in cases of a relevant guest speaker. Additional support is available via EIT Student Academic Services. To schedule a tutoring session visit https://ualr.edu/eit/tutor/.

Course Format

The course will be conducted as a seminar. Participation counts and may include small group presentations and exercises. A high level of student participation is required. Make sure that all assigned preparation and readings are done in advance and that you are ready to engage in full examination and discussion of topics. The instructor will not hesitate to call on students for questions and comments. It is, therefore, critical that reading assignments be completed before class in which they are addressed and reviewed.

Academic Integrity (501.13)

Plagiarism on any assignment will at a minimum result in 0 points for the assignment. We reserve the right to pursue further disciplinary action if appropriate (e.g. any student caught cheating on an assignment/assessment will receive an "F" for the course, and we may pursue action with the Committee on Academic Integrity). Plagiarism includes copying someone else's work and claiming it as your own, or collaborating excessively with another person or persons and claiming the work as solely your own. It is strongly recommended that students maintain a record of the preparation of their major assignments.

UA Little Rock Disability Policy

Your success in this class is important to me, and it is the policy and practice of the UA Little Rock to create inclusive learning environments consistent with federal and state law. If you have a documented disability (or need to have a disability documented), and need an accommodation, please contact me privately as soon as possible, so that we can discuss with the Disability Resource Center (DRC) how to meet your specific needs and the requirements of the course. The DRC offers resources and coordinates reasonable accommodations for students with disabilities. Reasonable accommodations are established through an interactive process among you, your instructor(s) and the DRC. Thus, if you have a disability, please contact me and/or the DRC, at 501–569–3143 (V/TTY) or 501–683–7629 (VP). For more information, please visit the DRC website at ualr.edu/disability.

UA Little Rock Inclement Weather Policy (215.1)

- During inclement weather, UA Little Rock will make a decision whether or not to close based on all available information.
- The chancellor will decide whether or not conditions warrant canceling classes and activities and closing the
 campus or whether classes and activities will be canceled but with specified campus offices open. Online or
 web-enhanced classes will continue as scheduled at the discretion of the faculty member.
- 3. The UA Little Rock website, UA Little Rock email, the university's main telephone number (501.569.3000), and the Rave campus alert notification system are the official means of communicating information concerning weather-related closings.

- 4. When necessary, the university will announce a separate decision about canceling night classes (those classes starting at 4:20 p.m. or later) by 2 p.m., if possible.
- 5. Ordinarily, sites remote from campus such as the Bowen Law School, the Arkansas Studies Institute, and the Benton Center will close or cancel classes and activities whenever the university does so. In some circumstances, however, a separate decision may be made whether or not a site remote from campus will be open or closed, and this decision will be announced through the university's official means of communicating weather-related closings.
- 6. Vice chancellors are responsible for seeing that necessary services are provided in their respective areas when the university is closed. Employees required to provide such services will be identified by their supervisors. Classified employees who must report to work when the university is closed due to inclement weather will be allowed compensation time of 1.5 hours for one hour worked. Persons who are not required to work when the university is closed will be granted authorized absence. Employees who do not report to work when the campus is open will be charged annual/compensatory leave or leave without pay. The Payroll Department will prescribe payroll reporting and timekeeping.
- 7. The Policy Advisory Council of the University Assembly will recommend to the chancellor if and when missed undergraduate and graduate class days should be made up. In the event that the university is closed during a final examination day, the provost, in consultation with the Faculty Senate president, will reschedule any missed graduate or undergraduate final examinations with the exception of online exams which will continue as scheduled.
- 8. Weather and road conditions vary from place to place. Employees and students are expected to exercise good judgment regarding the safety of travel when road conditions are affected by the weather.