

UNIVERSITY OF CENTRAL ARKANSAS COLLEGE OF BUSINESS VISION, MISSION, AND CORE VALUES STATEMENT

COB Vision

Our vision is to be a recognized leader in developing business talent and ideas that create growth and opportunity in Arkansas and globally.

COB Statement of Mission and Core Values

We educate a diverse population of current and future business professionals to successfully and ethically meet the challenges of the global business environment. Through active engagement with the local, regional, national, and global communities, our faculty strive to deliver a high-quality business education via experiential education, a relevant curriculum, and scholarly contributions. We pursue continuous improvement opportunities to add value for our College and its stakeholders.

In carrying out this mission, the College of Business is guided by the following core values and expects the following outcomes:

1. Intellectual Excellence.

- 1.1. Educate students: We promote intellectual and professional development of students by emphasizing communication, critical and analytical thinking, collaboration, information management and a broad exposure to key business disciplines.
- 1.2. Scholarship: We believe that faculty and students should engage in professional development and scholarly endeavors that promote and impact the application, creation and dissemination of knowledge through contributions to business practice, learning and pedagogical research, and discipline-based scholarship.
- 1.3. Cultural competence: We maintain and develop current and responsive curriculum that prepares students for the global business environment through broad exposure to key business disciplines.
- 1.4. Physical learning environment: We strive to provide a physical infrastructure with appropriate technology that provides an environment in which our students and faculty can thrive professionally and intellectually.

2. Community.

- 2.1. Collegiality: We encourage transparency in our decision making practice through a process of shared governance based on interactions among faculty, staff, and students.
- 2.2. Service: We pursue collaborative partnerships between our internal and external stakeholders to impact and promote life-long and experiential learning, research, service, and community engagement.

3. Diversity.

3.1. We value the opportunity to work, learn, and develop in a community that embraces the diversity of individuals and ideas.

4. Integrity.

- 4.1. Ethics: We are committed to ethical and responsible behavior in our own actions and to developing the same commitment in our students by promoting the awareness of professional ethical responsibilities.
- 4.2. Responsibility: We commit to being responsible and accountable in our operations at all levels, including assessment and continuous improvement of our academic programs and transparency in our fiscal and operational proceedings.

Learning Goals

Our graduates shall possess:

- 1. Critical Thinking & Analytical Thinking Skills;
- 2. Awareness of the Global Business Environment;
- 3. Ethical Reasoning Abilities;
- 4. Effective Communication Abilities;
- 5. Effective Collaborative Skills;
- 6. Understanding of a Broad Range of Business Disciplines.

Course Syllabus

Course Information

| Course Number: | MIS-3339 | | | |
|-----------------------|---|--|--|--|
| Course Name: | Programming in Java I | | | |
| CRN: | 26916 | | | |
| Semester: | Spring 2019 | | | |
| Location: | College of Business: Room 308 | | | |
| Class Hours: | 12:15 PM – 1:30 PM (Tuesdays & Thursdays) | | | |

Instructor Information

| Name: | Dr. Jeff Hill | | | |
|-------------------------|---|--|--|--|
| Office Location: | COB 305P | | | |
| Work Email: | ghill@uca.edu | | | |
| Phone: | 501-450-5347 | | | |
| Office Hours: | 8:30 AM – 10:00 AM & 1:00 PM – 2:30 PM Mondays & Wednesdays | | | |
| | 8:30 AM – 9:30 AM & 1:30 PM – 2:30 PM Tuesdays & Thursdays | | | |

Prerequisites

MIS 3300 – Introduction to Computer Architecture and Programming

Textbook and Instructional Materials Required

Lewis & Loftus: Java Software Solutions, 8th Ed., Pearson, 2014. ISBN: 978-0-13-359495-9

Course Description

This course provides a hands-on introduction to the Java programming language through a combination of discussion, lecture, demonstration, and assignment activities. The course investigates solutions development from the object-oriented programming perspective: classes and interfaces, functional decomposition, and a variety of construction techniques such as association, aggregation, composition, and inheritance. This course introduces intermediate programming techniques such as nested control structures, polymorphic object behavior, 3rd party application programming interfaces, and web services. Prerequisite: MIS 3300.

Course Objectives

The course provides an accelerated presentation of the fundamental programming principles learned in MIS 3300 to convey the Java specific requirements for implementation. The course acquaints students with a variety of development environments across multiple business-relevant operating systems. The course then introduces and develops intermediate programming concepts leveraging Java's object-oriented programming perspective.

Learning objectives

• Students will apply fundamental programming concepts and technical skills from prerequisite courses and integrate those concepts and skills into to the object-oriented paradigm (*Apply*)

- Students will demonstrate proficiency in an industry standard integrated development environment (*Apply*)
- Students will demonstrate proficiency in industry standard modeling techniques by creating appropriate UML documentation (*Apply*)
- Students will apply and adhere to Java's programming conventions (*Apply*)
- Students will employ complex control structures (*Apply*)
- Students will apply the object-oriented construction techniques (*Apply*)
- Students will differentiate static and instance class members (*Analyze*)
- Students will summarize the use cases of design patterns, describe their contemporary categorizations, and employ creational pattern(s) (*Apply*)
- Students will construct programmatic solutions to business problems using appropriate graphical and command-line user interfaces (*Synthesis*)
- Students will employ appropriate 3rd party APIs (*Apply*)
- Students will demonstrate using multiple contemporary operating systems (e.g. Windows, Linux) to compile and execute Java programs (*Apply*)

Bloom's Taxonomy Score: (11 LO) 3.27

Course Delivery Method

Lecture and lab.

Grading

Grades will be assigned according to the following scale: (Your percentage would depend upon what you do.)

A. >= 89.5 B. >= 79.5 and < 89.5 C. >= 69.5 and < 79.5 D. >= 59.5 and < 69.5 F. < 59.5

Grade Based on:

Skill Assignments ~20% Homework Assignments ~24% Quizzes ~16% Exam 1 ~10% Exam 2 ~10% Team Project ~20%

DESCRIPTION OF MAJOR DELIVERABLES/COURSE REQUIREMENTS

Class Schedule: Refer to last page.

Evaluations (Fall & Spring) Student evaluations of a course and its professor are a crucial element in helping faculty achieve excellence in the classroom and the institution in demonstrating that students are gaining knowledge. Students may evaluate courses they are

taking starting on the Monday of the thirteenth week of instruction through the end of finals week by logging in to myUCA and clicking on the Evals button on the top right.

POLICIES AND PROCEDURES

Attendance and Drop policies

Attendance is important for this class; concepts and practices beyond those in the text will be covered in class. I will take roll at the start of every class period. **IF YOU ARE LATE, IT IS** *YOUR* **RESPONSIBILITY TO MAKE SURE YOUR ATTENDANCE IS COUNTED.** More than 2 total lecture or exam class absences will result in the student being dropped from the course for non-attendance. This means an automatic F if after the university's drop date.

FINAL DATE TO WITHDRAW IS: *March 29, 2019* – after this date, only grades of A, B, C, D, F will be recorded.

Students are expected to pay attention in class and work along with the instructor as chapter material is covered. At the instructor's discretion, students will be marked absent for surfing the web, checking email, working on homework, or working on activities not related to this course. No use of cell phones, iPods, tablets, or other electronic devices are allowed in class (unless used to read course ebook).

Assignment Submission

All homework assignments are due (via Blackboard) at 11:59 PM on the date indicated in the course schedule. Late submissions are not accepted for any reason. Avoid Blackboard and connection issues by not waiting until the last minute to submit.

Makeup Exams

Makeup exams will not generally be offered. Exams are taken in-class and every effort should be made by the student to take the exam as scheduled. Discuss properly documented long-term illness or similar circumstances with the professor for makeup opportunity. Conflicts with work and/or child-care **IS NOT AN ACCEPTABLE EXCUSE** for not taking your exam as scheduled, *PLAN AHEAD*!

Classroom Policies

Computer Lab Rules:

- No Food, Drink, or Tobacco Allowed. Please properly dispose of these items before entering the lab.
- Clean Up Your Work Area. Throw away trash, straighten equipment, and push in your chair. Keep work area neat.
- Talk Quietly. Others around you are trying to work.
- The Printer Is Not A Copy Machine. If you need more than one copy, print one copy and use a copy machine for the others.
- Log Out And Turn Off Your Computer. This ensures that you are logged out of the system and the next student can use the computer. It also ensures you can get back into the system from somewhere else on campus.

Plagiarism

This course involves writing programming source code as an academic and creative exercise. As intellectual property, programming source code is granted the exact same protections as any other form of creative composition. These protections extend not only to explicit duplication of programming source code, but also to creative components such as the logical flow, structure and control(s) associated with a program. All of these creative components are considered intellectual property and are afforded protections against unethical or unlawful use.

In this course, duplication of creative components from any source will be considered plagiarism and offenders will be subject to the provisions of the university's Academic Integrity Policy. Per university policy, at the discretion of the course professor, any appropriate course-related sanction may be imposed up to and including dismissal from the course with a grade of F. Additional sanctions may be imposed by the university as specified by university policy. Continued enrollment in this course affirms a student's acceptance of this course policy.

Academic Integrity Statement

The University of Central Arkansas affirms its commitment to academic integrity and expects all members of the university community to accept shared responsibility for maintaining academic integrity. Students in this course are subject to the provisions of the university's Academic Integrity Policy, approved by the Board of Trustees as Board Policy No. 709 on February 10, 2010, and published in the Student Handbook. Penalties for academic misconduct in this course may include a failing grade on an assignment, a failing grade in the course, or any other course-related sanction the instructor determines to be appropriate. Continued enrollment in this course affirms a student's acceptance of this university policy.

Disabilities Act Statement

The University of Central Arkansas adheres to the requirements of the Americans with Disabilities Act. If you need an accommodation under this Act due to a disability, please contact the UCA Office of Disability Services, 450-3613.

Sexual Harassment and Academic Policies

All students are required to familiarize themselves with the University of Central Arkansas policy on sexual harassment and on academic policies. These policies are printed in the Student Handbook.

Title IX

If a student discloses an act of sexual harassment, discrimination, assault, or other sexual misconduct to a faculty member, the faculty member cannot maintain complete confidentiality and is required to report the act and may be required to reveal the names of the parties involved. Any allegations made by a student may or may not trigger an investigation. Each situation differs and the obligation to conduct an investigation will depend on those specific set of circumstances. The determination to conduct an investigation will be made by the Title IX Coordinator. For further information, please visit: http://uca.edu/titleix.

Emergency Procedures Summary (EPS)

An Emergency Procedures Summary (EPS) for the building in which this class is held will be discussed during the first week of this course. EPS documents for most buildings on campus are available at http://uca.edu/mysafety/bep/. Every student should be familiar with emergency procedures for any campus building in which he/she spends time for classes or other purposes.

Other Required Materials/Competencies/Resources:

None.

ACCREDITATION & ASSURANCE OF LEARNING

Learning Goal(s) Assessed in this Class

X There is no formal assessment activity scheduled in this class.

There is formal assessment activity scheduled in this class.

Learning Goals N/A | Learning Objective N/A | Measure N/A | Benchmark N/A |

MIS 3339 Programming in Java I Course Schedule Spring 2019

| Class | Date | Pages | Торіс |
|-------|------|---------------------|--|
| 1 | 1/10 | | Syllabus & course introduction |
| 2 | 1/15 | 26-49 | Introduction: Java, conventions & expectations, class-based OOP, main |
| | | | method, Java packages & projects (In-class Demo: Eclipse & Java) |
| 3 | 1/17 | 58-75 | Review: Data types, variables, scope, primitives & reference, wrappers & |
| | | 114-116 | autoboxing, logic control structures: sequence & selection |
| | | 141-143 | |
| | | 204-226 | |
| 4 | 1/22 | 226-235 | Review: Comparing data values, logic control structures: switch & |
| | | 269-282 | iteration: while, do & for |
| 5 | 1/24 | 75-92 | Review: String class and built-in functions, math formulas, algorithms, |
| | | 118-131 | Math class and built-in functions, 1D data structures: array & ArrayList, |
| | | 245-248 | type conversions & Scanner class |
| | | | Homework Assignment 1 (due 1/25 @11:59 PM) |
| 6 | 1/29 | 172-181 | Review: methods: void, value returning & single parameter, Java's for-each |
| | | 282-285 | loop Skill Assignment 1 (due 1/30 @11:59 PM) |
| 7 | 1/31 | 138-140 | Class construction: static class members, constants, final, enumerations & |
| | | 301-309 | import Skill Assignment 2 (due 2/1 @11:59 PM) |
| 8 | 2/5 | 159-172 | Class construction: multiple-class programs, non-static class members, |
| | | 181-182 | objects & instances, this, ctor, instanceof, immutable objects, accessor |
| | | | methods, encapsulation Skill Assignment 3 (due 2/6 @11:59 PM) |
| 9 | 2/7 | Blackboard | Class construction: .toString(), .equals(), .hashCode(), .compareTo(), 2D |
| | | Reading List | data structure: ArrayList <customclass> Homework Assignment 2 (due 2/8</customclass> |
| | | C C | @11:50 PM) |
| 10 | 2/12 | Blackboard | Diagramming in Astah: (review) Activity Diagram, Class Diagram & Reverse |
| | | Video List | Engineer Diagramming Skill Assignment 4 (due 2/13 @11:59 PM) |
| 11 | 2/14 | 332-345 | Class construction: functional decomposition, multiple parameter |
| | | 404-408 | methods, method signatures, method overloading, varargs Skill |
| | | | Assignment 5 (due 2/15 @11:59 PM) |
| 12 | 2/19 | 310-329 | Class construction: association, aggregation, composition, interfaces as |
| | | | simple type Skill Assignment 6 (due 2/20 @11:59 PM) |
| 13 | 2/21 | Blackboard | Class construction: builder design pattern Homework Assignment 3 (due |
| | | Reading List | 2/22 @11:59 PM) |
| 14 | 2/26 | | Study day (No class) |
| 15 | 2/28 | Exam | Mid-term exam |
| 16 | 3/5 | 444-468 | Class construction: inheritance & polymorphism, super |
| | | 487-501 | |
| 17 | 3/7 | 502-504 | Class construction: interfaces & polymorphism (interfaces as multiple |
| | | | inheritance) Homework Assignment 4 (due 3/8 @11:59 PM) |
| 18 | 3/12 | 537-552 | Robust and correct programming |
| 19 | 3/14 | Blackboard | Database connectivity & 3 rd party libraries Homework Assignment 5 (due |
| | | Reading List | 3/15 @11:59 PM) |
| | | | Spring Break (No class) |

| 20 | 3/26 | Lab | .jar file creation & distribution & Linux exercise |
|---------------|---------------|---------------------|--|
| 21 | 3/28 | Blackboard | Web services, servlets, data serialization (JSON & XML), web applications, |
| | | Reading List | & containers |
| 22 | 4/2 | Blackboard | Servlet (HTML form processing) & JSON usage Homework Assignment 6 |
| | | Reading List | (due 4/3 @11:59 PM) |
| 23 | 4/4 | | Study day (No class) |
| 24 | 4/9 | Exam | Final exam |
| 25 | 4/11, | Lab | Team project demonstration & team sign-up |
| \rightarrow | 4/16, 4/18 | | Professor approval of topic selection due 4/12 |
| | 4/23, | | Deliverable 1 (due 4/17 @ 11:59 PM) |
| | 4/25 | | Deliverable 2 (due 4/24 @ 11:59 PM) |
| | | | Deliverable 3 (due 4/25 @ 11:59 PM) |
| Final | 4/30 | | Project presentation Deliverable 4 (due 4/30 @11:00 AM) |