

Advanced Web Application Development

Syllabus

CSC 456

Fall 2015

Instructor: Benjamin Baxter
Office: GH 460
Email: baxterb2@nku.edu
Office Hours: By appointment only.

Class Meeting Time: R 6:15pm – 9:00pm
Class Meeting Place: GH 333

Textbook: Gradle in Action (Manning) (Paperback), (ISBN: 9781617291302)

Head First Servlets and JSP: Passing the Sun Certified Web Component Developer Exam (Paperback), 2nd Edition (ISBN: 9780596516680)

Prerequisites: C- or better in CSC 301 and CSC 360.

Course Content: Advanced technologies for developing web applications for business and industry using J2EE. Focus on the design and development of scalable, robust, and extensible web applications; different frameworks for developing web applications and the software build process. Web component design and programming, data access, product packaging, and application deployment.

Course Topics: It will cover the following topics:

- Web application architecture
- Java development with Ant
- MVC
- Servlet
- JSP
- Java Beans
- JSTL
- Web Services
- Web Sockets
- Security
- Product packaging and deployment

Student Outcomes: By the end of the course, students will

- Understand web application development architecture
- Be able to use a build scripting tool, such as Gradle, to build and deploy J2EE web applications
- Be able to choose the most effective J2EE component for a particular functionality of a web application
- Design and implement a project using Servlet, JSP, Java Beans and other J2EE technologies
- Be able to implement a web service application

- Be familiar with product packaging and application deployment

Student Assessment Information:

Students will be assessed through homework/project assignments and tests that are designed to demonstrate students' understanding of each concept.

Grading:

Assignments: 20%

Course Project: 20%

Test 1 (6:15pm - 9:00pm, Thursday, Sep. 17, 2014): 20%

Test 2 (6:15pm - 9:00pm, Thursday, Oct. 22, 2014): 20%

Final exam (6:45pm - 8:45pm, Thursday, Dec. 10, 2014): 20%

Grading Scale		
Letter Grade	% Equal to or Greater than	Grade Point
A	93	4.00
A-	90	3.67
B+	87	3.33
B	83	3.00
B-	80	2.67
C+	77	2.33
C	73	2.00
C-	70	1.67
D+	67	1.33
D	60	1.00
F	0	0

Grading Procedure for Assignments:

Students should turn in their assignments via the submission tool before 11:59pm of the due date for each assignment. No late assignments will be accepted after the assignment has been graded. Also, once the solution to an assignment has been discussed in the class or distributed to the class, no late assignment will be accepted.

Absentee Policy:

Students should make their best efforts to attend each class. If you missed any class, you are responsible for any content covered in that class.

Make-up Test:

Only for a reasonable reason a student can be allowed to have a make-up test for one of the missed tests. The student needs to notify the instructor immediately after the missed test with a verifiable reason. After getting the permission for the make-up test from the instructor by email, the student will be given a make-up test. A student can only have one make-up test for this class.

Disability Disclosure: Students with disabilities who require accommodations (academic adjustments, auxiliary aids or services) for this course must register with the Disability Services Office. Please contact the Disability Service Office immediately in the University Center, Suite 320 or

call (859)572-6373 for more information. Verification of your disability is required in the Disability Services Office for you to receive reasonable academic accommodations.

Course Evaluation: Northern Kentucky University takes instructor and course evaluations very seriously. It is an important responsibility of NKU students as citizens of the university to participate in this evaluation process. During the two weeks prior to the end of the semester, you will be asked to reflect upon what you have learned in this course, the extent to which you have invested the necessary effort to maximize your learning, and the role your instructor has played in the learning process. It is very important that you complete the online evaluations with thoughtfully written comments. You will go to eval.nku.edu to do this.

This semester NKU is implementing the following procedure: students who do not complete the course evaluation (or who do not at least opt out of doing so from within the online evaluation form) should expect to incur a two week delay in accessing their grade in the course. Otherwise, students will be able access to their course grade as soon as it is submitted by the instructor, as usual.

Credit Hour Policy

In accordance with federal policy, NKU defines a credit hour as the amount of work represented in the achievement of student learning outcomes (verified by evidence of student achievement) that reasonably approximates one hour (50 minutes) of classroom instruction and a minimum of two hours of out-of-class student work. For every course credit hour, a typical student should expect to spend at least three hours per week of concentrated attention on course-related work including, but not limited to, class meeting time, reading, reviewing, organizing notes, studying and completing assignments. At least an equivalent amount of time is expected for other academic activities such as online courses, laboratory work, internships, practica, studio work and other academic work leading to the award of credit hours.

Estimates of the time required for a typical student to complete course expectations are as follows:

In-Class: 1 day * 165 minutes * 15 weeks	= 41.25 Hours (2475 minutes)
Assignments: 4 Hours * 10 assignments	= 40 Hours
Readings: 16 Subjects * 2 Hours	= 32 Hours
Group Project: 1 Project * 30 Hours	= 30 Hours
Total:	143.25 Hours

Notes: The instructor reserves the right to change this syllabus during the semester.