**SUBMITTED BY:**

<table>
<thead>
<tr>
<th>Department</th>
<th>College/School</th>
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<tbody>
<tr>
<td>Business Systems Technologies, IT Specialist Program</td>
<td>CRCD</td>
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<table>
<thead>
<tr>
<th>Prepared by</th>
<th>Phone</th>
</tr>
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<tbody>
<tr>
<td>Keith Swarner</td>
<td>455-2820</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Email Contact</th>
<th>Faculty Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="mailto:keith.swarner@uaf.edu">keith.swarner@uaf.edu</a></td>
<td><a href="mailto:keith.swarner@uaf.edu">keith.swarner@uaf.edu</a>/455-2820</td>
</tr>
</tbody>
</table>

See [http://www.uaf.edu/uafgov/faculty/cd/cdman.html](http://www.uaf.edu/uafgov/faculty/cd/cdman.html) for a complete description of the rules governing curriculum & course changes.

1. **ACTION DESIRED (check one):**  
   - [ ] Trial Course  
   - [X] New Course

2. **COURSE IDENTIFICATION:**  
   - Dept: CITS  
   - Course #: 224  
   - No. of Credits: 3

Justify upper/lower division status & number of credits:

This course will provide students with the knowledge and skills required to implement client-side Web page scripting and would be appropriate for students who are entering their second semester of the IT Specialist associate degree program.

Approximately the following amount of instructional time will be delivered in each of the following major topic areas (Note: the terminology used in the following list is generic language and will not necessarily match perfectly with the topics language used on the sample syllabus being submitted with this new course form): World Wide Web & HTML Basics, .5 hrs.; Well-Formed Web Pages – XHTML, .5 hrs.; Overview of Web Development Components and Technologies, .5 hrs.; JavaScript Programming Language Introduction, 1 hr.; Structuring JavaScript Code, 1 hr.; Logic and Debugging, .5 hrs.; Data Types and Operators, 1 hr.; Building Expressions, 1 hr.; Working with Strings, 1 hr.; Operator Precedence, .5 hrs.; Understanding and Working with Functions – defining, calling, variable scope, built-in functions, 1 hr.; Understanding and Working with Events – elements and events and referencing elements, 1 hr.; Making Decisions with if; if…else; nested if and if…else; and switch Statements, 1 hr.; Repeating Code with while; do…while; for; and continue Statements, 1 hr.; Browser Object Model (BOM), 1 hr.; Window Object, History Object, Location Object, Navigator Object, Screen Object, 2 hrs.; Referring to Frames and Windows, .5 hrs.; Forms and Form Data Validation, 3 hrs.; Overview of Object-oriented Programming (OOP), .5 hrs.; Built-in JavaScript Classes, .5 hrs.; Date Class, Numbers Class, Math Class, 1.5 hrs.; Defining Custom JavaScript Objects, 1.5 hrs.; Manipulating Data in Strings and Arrays, 3 hrs.; Debugging and Error Handling, 3 hrs.; Overview of State Information, .5 hrs.; Saving State Information, 1.5 hrs.; Security Issues, 1 hr.; Overview of the HTML DOM, 3 hrs.; Overview of Dynamic Web Pages and Dynamic HTML (DHTML), 3 hrs.; Overview of AJAX, 3 hrs.

3. **PROPOSED COURSE TITLE:**  
   - Web Scripting

4.**CROSS LISTED?**  
   - [ ] Yes  
   - [ ] No

   (Requires approval of both departments and deans involved. Add lines at end of form for such signatures.)

5. **STACKED?**  
   - [ ] Yes  
   - [ ] No

   (Every or Alternate) Fall, Spring, Summer — or As Demand Warrants

6. **FREQUENCY OF OFFERING:**  
   - As Demand Warrants

7. **SEMESTER & YEAR OF FIRST OFFERING**  
   - (if approved) Fall 2009
8. COURSE FORMAT:
NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the core review committee.

COURSE FORMAT:
(check one)  
1  2  3  4  5  X  6 weeks to full semester

OTHER FORMAT (specify)  NA

Mode of delivery (specify lecture, field trips, labs, etc)  Lecture

9. CONTACT HOURS PER WEEK:

3  LECTURE hours/weeks  0  LAB hours/week  0  PRACTICUM hours/week

Note: # of credits are based on contact hours. 800 minutes of lecture=1 credit. 2400 minutes of lab in a science course=1 credit. 1600 minutes in non-science lab=1 credit. 2400-4800 minutes of practicum=1 credit. 2400-8000 minutes of internship=1 credit. This must match with the syllabus. See http://www.uaf.edu/uafgov/faculty/cd/credits.html for more information on number of credits.

OTHER HOURS (specify type)  NA

10. COMPLETE CATALOG DESCRIPTION including dept., number, title and credits (50 words or less, if possible):

CITS F224  Web Scripting
3 Credits  Offered As Demand Warrants
This course provides an introduction to client-side Web page scripting. The course covers basic programming concepts, including data representation, functions, control structures, and arrays. Topics include client-side scripting with JavaScript, object-oriented JavaScript, design issues, error handling, security, the Document Object Model, and dynamic HTML and AJAX. Prerequisite: CITS F205 or CS F103, F201, or F205 and CITS 222, or instructor approval.

(3+0)

11. COURSE CLASSIFICATIONS: (undergraduate courses only. Use approved criteria found on Page 10 & 17 of the manual. If justification is needed, attach on separate sheet.)

H = Humanities  N = Natural Science  S = Social Sciences

Will this course be used to fulfill a requirement for the baccalaureate core?  YES  X  NO

IF YES, check which core requirements it could be used to fulfill:

O = Oral Intensive, Format 6  W = Writing Intensive, Format 7  Natural Science, Format 8

12. COURSE REPEATABILITY:

Is this course repeatable for credit?  YES  X  NO

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

NA

How many times may the course be repeated for credit?  NA  TIMES

If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course?  NA  CREDITS

13. GRADING SYSTEM:

LETTER:  X  PASS/FAIL:  

**RESTRICTIONS ON ENROLLMENT (if any)**

**14. PREREQUISITES**

<table>
<thead>
<tr>
<th>RESTRICTIONS</th>
<th>CITS F205 or CS F103, F201, or F205 and CITS 222, or instructor permission.</th>
</tr>
</thead>
</table>

These will be **required** before the student is allowed to enroll in the course.

<table>
<thead>
<tr>
<th>RECOMMENDED</th>
<th>None</th>
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</table>

Classes, etc. that student is strongly encouraged to complete prior to this course.

<table>
<thead>
<tr>
<th>15. SPECIAL RESTRICTIONS, CONDITIONS</th>
<th>None</th>
</tr>
</thead>
</table>

**16. PROPOSED COURSE FEES**

<table>
<thead>
<tr>
<th>PROPOSED COURSE FEES</th>
<th>None</th>
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</table>

**17. PREVIOUS HISTORY**

Has the course been offered as special topics or trial course previously? **Yes/No**

<table>
<thead>
<tr>
<th>PREVIOUS HISTORY</th>
<th>Yes/No</th>
<th>No</th>
</tr>
</thead>
</table>

If yes, give semester, year, course #, etc.:  
NA

**18. ESTIMATED IMPACT**

**WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.**

It is anticipated that an adjunct instructor will be hired to teach this course. If course enrollments are not sufficient to meet the costs of hiring an adjunct, the course will not be offered; or depending on enrollments in other courses, the teaching load of a full-time faculty may be adjusted.

<table>
<thead>
<tr>
<th>19. LIBRARY COLLECTIONS</th>
<th>Have you contacted the library collection development officer (<a href="mailto:ffklj@uaf.edu">ffklj@uaf.edu</a>, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>No</td>
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</table>

**20. IMPACTS ON PROGRAMS/DEPTS**

What programs/departments will be affected by this proposed action?  
Include information on the Programs/Departments contacted (e.g., email, memo)

<table>
<thead>
<tr>
<th>IMPACTS ON PROGRAMS/DEPTS</th>
<th>ITS. All CRCD CIOS faculty from the following campus have been contacted regarding this change: IAC, KuC, NWC, TVC.</th>
</tr>
</thead>
</table>

**21. POSITIVE AND NEGATIVE IMPACTS**

Please specify **positive and negative** impacts on other courses, programs and departments resulting from the proposed action.

**Positive Impacts:** Currently students pursuing studies in Web development technologies within the IT Specialist program are only provided the opportunity to learn the skills and knowledge required to implement server-side web programming through CITS F225 Web Databases and Programming (previously CIOS F271). The addition of this course will provide students the opportunity to also learn the knowledge and skills required to implement client-side webpage scripting. The result of students learning both server-side and client-side Web programming is that the students will develop a much more comprehensive understanding of skills and knowledge required of an individual working as Web developer. This course will serve as a required course for the Web Development and Administration concentration of the IT Specialist A.A.S. degree program.
JUSTIFICATION FOR ACTION REQUESTED

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

Over the past nine month faculty within the IT Specialist program have been actively collaborating and seeking input from our community advisory council, recent graduates, and the UAF Computer Science department with the goal of streamlining and improving the educational opportunities provided through the certificate and associate degree programs. One of the significant outcomes of this process was the decision to offer three concentrations that will enable students to develop a comprehensive and an in-depth set of skills and knowledge within specific area of information technology; rather than a less comprehensive set of skills and knowledge over a broader range of information technology areas.

As was mentioned under item 21, this course will serve as a required course for the Web Development and Administration concentration of the IT Specialist A.A.S. degree program. Currently three courses that are relevant to this concentration already exist within the IT Specialist degree program; and three new courses have been identified as needed for students to develop the depth of skill and knowledge required to be prepared for employment in this area of information technology.

Individuals preparing to work as a Web developer must possess the skills and knowledge of both client-side and server side web programming. Students completing the IT Specialist A.A.S. program currently have the opportunity to develop server-side programming skills through CITS 225 Web Databases and Programming (previously CIOS 271). Without the addition of this course, which is focused on client-side web programming, these students will possess an incomplete set of skills as they look for employment in this area of information technology.
**APPROVALS: SIGNATURES ON FILE AT THE GOVERNANCE OFFICE**

<table>
<thead>
<tr>
<th>Signature, Chair, Program/Department of:</th>
<th>IT Specialist Program</th>
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<tr>
<td>Date</td>
<td>10/6/2008</td>
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<table>
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<tr>
<th>Signature, CRCD Division Coordinator for:</th>
<th>Business Systems Technology</th>
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<tr>
<th>Signature, Chair, College/School Curriculum Council for:</th>
<th>College of Rural and Community Development</th>
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<td>Date</td>
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<table>
<thead>
<tr>
<th>Signature, Dean, College/School of:</th>
<th>College of Rural and Community Development</th>
</tr>
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<tr>
<td>Date</td>
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**Signature of Provost (if applicable)**

Offerings above the level of approved programs must be approved in advance by the Provost.

**ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE**

<table>
<thead>
<tr>
<th>Signature, Chair, UAF Faculty Senate Curriculum Review Committee</th>
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<tr>
<td>Date</td>
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**ADDITIONAL SIGNATURES: (If required)**

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<th>Signature, Chair, Program/Department of:</th>
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<td>Date</td>
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<tr>
<td>Date</td>
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</table>
ATTACH COMPLETE SYLLABUS (as part of this application).
Note: syllabus must follow the guidelines discussed in the Faculty Senate Guide http://www.uaf.edu/uafgov/faculty/cd/syllabus.html.
The department and campus wide curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course change will be denied.

SYLLABUS CHECKLIST FOR ALL UAF COURSES
During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

1. **Course information:**
   - Title, number, credits, prerequisites, location, meeting time (make sure that contact hours are in line with credits).

2. **Instructor (and if applicable, Teaching Assistant) information:**
   - Name, office location, office hours, telephone, email address.

3. **Course readings/materials:**
   - Course textbook title, author, edition/publisher.
   - Supplementary readings (indicate whether required or recommended) and any supplies required.

4. **Course description:**
   - Content of the course and how it fits into the broader curriculum;
   - Expected proficiencies required to undertake the course, if applicable.
   - Inclusion of catalog description is strongly recommended, and Description in syllabus must be consistent with catalog course description.

5. **Course Goals (general) and Student Learning Outcomes (more specific)**

6. **Instructional methods:**
   - Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

7. **Course calendar:**
   - A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say “lab”. Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

8. **Course policies:**
   - Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

9. **Evaluation:**
   - Specify how students will be evaluated, what factors will be included, their relative value, and how they will be tabulated into grades (on a curve, absolute scores, etc.)

10. **Support Services:**
    - Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

11. **Disabilities Services:**
The Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials.
    - State that you will work with the Office of Disabilities Services (203 WHIT, 474-7043) to provide reasonable accommodation to students with disabilities.
Course Syllabus
CITS F224 Web Scripting
University of Alaska Fairbanks

Course Information
Course Number-Section, Title: CITS F224 TE1 Web Scripting
Number of Credits: 3.0
Prerequisite: CITS F205 or CS F103, F201, or F205 and CITS F222, or instructor permission
Class Location: UAF Downtown Center, Room 210
Meeting Days & Time: Thursday, 6:00-9:00 PM, 9/4 – 12/18.
This course will consist of one 3-hour class lecture delivered to students once a week for 14 weeks. Students can expected to spend an additional six to nine hours per week outside of scheduled classroom lecture studying lecture material, completing reading assignments and homework. Students will present their final project during the 15th week.

Instructor Information
Name: Keith Swarner
Office Location: UAF Downtown Center, 510 Second Ave, Fairbanks AK
Office Hours: 2:00 pm – 4:30 pm Monday, Tuesday and Thursday or by appointment
Telephone: 455-2820
Email: keith.swarner@uaf.edu

Course Readings/Materials
Required textbook/materials:
Title: JavaScript, Fourth Edition
Author(s): Don Gosselin
Publisher: Course Technology

Recommended textbook/materials: None

Course Description
This course provides an introduction to client-side Web page scripting. The course covers basic programming concepts, including data representation, functions, control structures, and arrays. Topics include client-side scripting with JavaScript, object-oriented JavaScript, design issues, error handling, security, the Document Object Model, and dynamic HTML and AJAX.

Course Goals
Upon successful completion of this course, the student will be able to define, explain, or perform tasks related to the following:
1. Client-side development of Web pages with JavaScript
2. Use JavaScript to process and validate form data before the data is sent to a server for processing
3. Implement object-oriented programming techniques with JavaScript programs
4. Use advanced techniques to manipulate data within strings and arrays
5. Effectively debug JavaScript programming errors
6. Work with and maintain state information
7. Use JavaScript to create dynamic and interactive Web pages
8. Understand how AJAX is used to quickly interact and exchange data with a Web server
Student Learning Outcomes

Upon successful completion of this course, the student will be able to:

1. Explain the history of the World Wide Web and HTML
2. Define and create well-formed Web pages
3. Describe web development and technologies used in web development
4. Understand the basic procedures for adding JavaScript to web pages
5. Understand and follow the rules regarding the placement and organization of JavaScript code within a web page
6. Understand how the terms logic and debugging apply to programs and programming
7. Work with and use expressions; operators; and strings
8. Understand operator precedence
9. Use functions to organize JavaScript code
10. Understand and work with events
11. Use if statements, if…else statements, and switch statements to make decisions
12. Use while statements, do…while statements, and for statements to execute code repeatedly
13. Use continue statements to restart looping statements
14. Understand and work with variables and data types
15. Describe the Browser Object Model (BOM) and elements that make up the BOM
16. Use JavaScript to refer to frames and windows
2.1. Understand and work with form elements and objects within a web page
2.2. Use JavaScript to manipulate and validate form elements and implement submit and reset functions within forms
3.1. Understand and explain object-oriented programming
3.2. Describe and use built-in JavaScript objects; such as the Date, Number, and Math objects
3.3. Define custom JavaScript objects
4.1. Manipulate strings and arrays
4.2. Work with regular expressions
4.3. Convert between strings and arrays
5.1. Explain the types of errors that can occur in a program and methods used to debug programming errors
5.2. Trace error message and use comments to locate bugs
5.3. Explain exception and error handling
6.1. Explain how Web browser use state information and reasons to maintaining state information
6.2. Save state information with hidden form fields, query strings, and cookies
6.3. Understand and describe security issues related to Web browsers and JavaScript
7.1. Describe the combination of technologies used to create dynamic Web pages
7.2. Understand and work with the Document Object Model (DOM)
7.3. Open and close the Document object; access document elements; work with the Image object
7.4. Use JavaScript to modify CSS styles and work with CSS positioning
7.5. Use DHTML to create expandable, navigation, and sliding menus
7.6. Utilize JavaScript to check for browser compatibility prior to loading a Web page
8.1. Describe Asynchronous JavaScript and XML (AJAX) and the combination of technologies used to create AJAX applications
8.2. Explain the role of HTTP and understand HTTP messaging
8.3. Use AJAX to request and receive server data
Instructional Methods
This course teaches students through lectures, demonstrations, instructor-led discussions and case projects. Students are expected to complete required reading assignments prior to each lecture. Students are expected to complete assigned homework during the week that follows that topic’s lecture and to arrive prepared to discuss homework at the beginning of the following week’s class.

Course Policies
Attendance: You are expected to attend classes regularly; unexcused absences may result in a failing grade. You are responsible for coordinating absences and the possibility of arranging to make up missed work with the instructor prior to the absence.

If an unforeseen circumstance prevents you from attending class you are expected to contact the instructor via email or phone prior to the start of the next class.

If you are required to participate in either (a) military or (b) UAF-sponsored activities that will cause you to miss class, you must notify your instructor as soon as possible of your absence. You must notify your instructor of all scheduled UAF-required absences for the semester (e.g., travel to athletic events) during the first week of classes.

Late Assignments: Late assignments will not be accepted unless arranged with the instructor.

Missed Exams: There will be no opportunity to make up exams except for pre-arranged absences with the instructor. Make-up exams must be completed prior to the next class meeting from which the exam was given.

Important Dates: Check the UAF Academic Calendar for important dates related to fee payment, class registration and last day to drop courses. The calendar can be viewed online at: http://www.uaf.edu/catalog/current/acad_calendar.html

Plagiarism/Academic integrity: Plagiarism and cheating are serious offenses and may result in failure on exams, papers, projects, or the course.

Support Services
The TVC Student Assistance and Advising Center provides services that contribute to a successful learning experience and transition to a career. TVC Student Assistance and Advising Center staff recognizes the unique concerns of adult and returning students. Services include pre-admission advising, academic assessment and placement advising, financial aid information and application, and assistance with choosing a major. Students can receive ongoing academic advising, degree planning and assistance with course selections.

Services are available by appointment and on a walk-in basis. Appointments can be scheduled by calling 455-2800 or students can go to the UAF Tanana Valley Campus Center, 604 Barnette Street, room 110.

Disability Services
The UAF Office of Disability Services implements the Americans with Disabilities Act (ADA), and insures that UAF students have equal access to the campus and course materials. The instructor will work the Office of Disability Services to provide reasonable accommodations to students with disabilities that have been documented through the UAF Office of Disability Services. Information about available services is available online at http://www.uaf.edu/disability/. The office can be reached by phone at 474-7043 or students can go to 203 WHIT on the UAF main campus.
Evaluation:
Final grades are calculated from the points earned in the following areas:

**Chapter Homework** .............................................................................................................. 50%
The end of each chapter contains 3-5 case projects designed to help students apply the concepts and skills covered in each chapter. Students will complete the case projects at the end of each chapter.

**Midterm Project** .................................................................................................................... 20%
Students will develop a website containing JavaScript elements covered in chapters 1-5. Midterm project websites must demonstrate use of numeric, Boolean, and string data types; must demonstrate use of decision making code and repeating code; use JavaScript to control the Web browser; and validate form data that has been entered by a user.

**Final Project** .......................................................................................................................... 30%
Students will develop a website containing JavaScript elements covered throughout. Students will be provided a list of required and optional elements for their final website project. Students will present their final projects during the final week of class.

Letter grades for the course will be determined as follows and will reflect the *Grading System and Grade Point Average Computation* policy stated in the current UAF Catalog.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>100–97%</td>
</tr>
<tr>
<td>A</td>
<td>96.9–93%</td>
</tr>
<tr>
<td>A-</td>
<td>92.9–90%</td>
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<tr>
<td>B+</td>
<td>89–87%</td>
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<tr>
<td>B</td>
<td>86.9–83%</td>
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<tr>
<td>B-</td>
<td>82.9–80%</td>
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<tr>
<td>D</td>
<td>66.9–63%</td>
</tr>
<tr>
<td>D-</td>
<td>62.9–60%</td>
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<tr>
<td>F</td>
<td>less than 60%</td>
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</tbody>
</table>

**Withdrawal** – Course withdrawals may be either student-initiated or faculty-initiated. A faculty-initiated withdrawal will be initiated if you don't meet prerequisites for a course or if you haven't participated substantially in the course. An attempt will be made to contact students prior to initiating a faculty-initiated withdrawal. It is the responsibility of the student to maintain current contact information (phone number and email address) within UA Online system.

**Incomplete** - An incomplete is a temporary grade used to indicate that the student has satisfactorily completed (C or better) the majority of work in a course but for personal reasons beyond the student’s control, such as sickness, has not been able to complete the course during the regular semester. An incomplete will only be assigned in a case when the student is current in the class until at least the last three weeks of the course. Negligence or indifference is not acceptable reasons for an “I” grade. If an incomplete assigned, it must be made up within one year or it will automatically be changed to an “F” grade.
Course Syllabus: CITS 224 Web Scripting

Course Calendar:
The following course calendar provides a weekly schedule of major course topics, reading assignments, homework assignments, and quizzes and exams. Students are expected to complete the reading assignment prior to the week in which the assignment is listed. Homework assignments are to be completed outside of schedule class time during the week after the course topic has been covered in class. Students should be prepared to discuss homework at the beginning of the following class.

Week 1 – Class 1
  Reading Assignment: Chapter 1 Introduction to Java Script
  Topics: History of World Wide Web – HTML, Web Browsers, Basic HTML Syntax; Well-Formed Web Pages – XHTML; Document Type Definitions; Cascading Style Sheets; Validating Web Pages; Client/Server Architecture; JavaScript and Client-Side Scripting; Server-Side Scripting and PHP; JavaScript Programming Language – <script> Element, JavaScript Objects; write( ) and writeln ( ), Adding Comments; Structuring JavaScript Code; Logic and Debugging
  Chapter Homework: Chapter 1 Case Projects

Week 2 – Class 2
  Reading Assignment: Chapter 2 Working with Data Types and Operators
  Topics: Variables – naming, declaring, initializing; Data Types – numeric, Boolean, string, null; Arrays – declaring and initializing, accessing and modifying elements; Building Expressions; Working with Strings; Operator Precedence
  Chapter Homework: Chapter 2 Case Projects

Week 3 – Class 3
  Reading Assignment: Chapter 3 Functions, Events, and Control Structures
  Topics: Understanding and Working with Functions – defining, calling, variable scope, built-in functions; Understanding and Working with Events – elements and events and referencing elements; if Statements; if…else Statements; Nested if and if…else Statements; switch Statements; while Statements; do…while Statements; for Statements; continue Statements
  Chapter Homework: Chapter 3 Case Projects

Week 4 – Class 4
  Reading Assignment: Chapter 4 Manipulating the Browser Object Model
  Topics: Browser Object Model (BOM); Window Object; History Object; Location Object; Navigator Object; Screen Object; Referring to Frames and Windows
  Chapter Homework: Chapter 4 Case Projects

Week 5 – Class 5
  Reading Assignment: Chapter 5 Validating Form Data with JavaScript
  Topics: Overview of Forms; Form Elements and Objects; Input Fields – text boxes, password boxes, push buttons, radio buttons, check boxes; Selection Lists; Submitting and Resetting Forms; Validating Submitted Data
  Chapter Homework: Chapter 5 Case Projects
Week 6 – Class 6
Midterm Project: Students will work on midterm projects. Projects must be completed and submitted to Blackboard prior to the start of Class 7.

Week 7 – Class 7
Reading Assignment: Chapter 6 Using Object-Oriented JavaScript
Topics: Overview of Object-oriented Programming (OOP); Overview of Built-in JavaScript Classes; Date Class; Numbers Class; Math Class; Defining Custom JavaScript Objects
Chapter Homework: Chapter 6 Case Projects

Week 8 – Class 8
Reading Assignment: Chapter 7 Manipulating Data in Strings and Arrays
Topics: Manipulating Strings; Overview of Regular Expressions; Working with Regular Expressions; Manipulating Arrays; Converting Between Strings and Arrays
Chapter Homework: Chapter 7 Case Projects

Week 9 – Class 9
Reading Assignment: Chapter 8 Debugging and Error Handling
Topics: Debugging Overview; Error Messages; Tracing Errors with window.alert(); Locating Bugs with Comments; Combining Debugging Techniques; Debugging Tools; Handling Exceptions and Errors; Checking XHTML Elements; Analyzing Logic; JavaScript URLs; JavaScript Language and Browser Bugs
Chapter Homework: Chapter 8 Case Projects

Week 10 – Class 10
Reading Assignment: Chapter 9 Managing State Information and Security
Topics: State Information Overview; Saving State Information – using hidden form fields, using query strings, using cookies; Security Issues
Chapter Homework: Chapter 9 Case Projects

Week 11 – Class 11
Reading Assignment: Chapter 10 Introduction to the Document Object Model (DOM)
Topics: Overview of Dynamic Web Pages and Dynamic HTML (DHTML); Overview of the HTML DOM; Opening and Closing the Document Object; Image Object; Accessing Document Elements
Chapter Homework: Chapter 10 Case Projects

Week 12 – Class 12
Reading Assignment: Chapter 11 Creating Dynamic HTML (DHTML)
Topics: Methods to Manipulate CSS with JavaScript; Overview of CSS Positioning; Dynamic Positioning with CSS and JavaScript; DHTML Menus – expandable menus, navigation menus, sliding menus; Checking Browser Compatibility
Chapter Homework: Chapter 11 Case Projects
**Course Syllabus: CITS 224 Web Scripting**

**Week 13 – Class 13**
*Reading Assignment:* Chapter 12 Updating Web Pages with AJAX  
*Topics:* Overview of AJAX; HTTP and HTTP Messaging; Requesting Server Data; Receiving Server Data  
*Chapter Homework:* Chapter 12 Case Projects

**Week 14 – Class 14**
*Final Project:* Students will work on final projects. Projects must be completed and ready to present prior to the start of Class 15.

**Week 15 – Class 15**
*Final Project:* Students will spend 5-8 minutes presenting their final project. Students will be expected to demonstrate how they have integrated JavaScript into their web site and should be prepared to provide a brief explanation of their JavaScript code.