COURSE INFORMATION

3 credit hours

Course Description

A study of advanced web development using beginning computer programming with HTML, PHP, JavaScript, Database, and media elements. This course requires "hands-on" programming independent of classroom instruction. Topics include variables, simple and complex data structures, debugging, and database interaction. The course will use JavaScript & PHP as the basis of understanding these concepts and to allow the students to learn how to create dynamic web pages.

Course Instructor

Dr. Fred McMahan

Course Author

Dr. Fred McMahan

Course Pre-requisites, Co-requisites, and/or Other Restrictions

CECS 5030 or equivalent.
CECS 5420 (web authoring) is useful, but not required.

Materials – Text, Readings, and Supplemental Readings

- Sams Teach Yourself PHP, MySQL & JavaScript All in One (6th Edition 2017)
  Julie C. Meloni
  ISBN: 978-0672337703
  Publisher: Sams Publishing

The following optional books are suggestions depending on how many cross references you like to have available when learning to program.

- PHP MYSQL Programming Language. In 8 Hours, For Beginners, Learn Coding Fast! (2018)
  Ray Yao
  ASIN: B07F76P3R9
  Publisher: Amazon Kindle

- Learning PHP, MySQL & JavaScript: With jQuery, CSS & HTML5 5 edition (June 8, 2018)
  Robin Nixon
  ISBN: 978-1491978917
  Publisher: O’Reilly Media

- SQL in 24 hours (6th edition 2015)
  Stephens, Jones, and Plew
  ISBN: 0672337592
  Publisher: Sams Publishing
Course Topics and Objectives:
1. Demonstrate application of appropriate programming constructs for branching and looping in the target language.
2. Select from among character, Boolean, integer, and floating-point data types the most appropriate data representation for a variety of data representations.
3. Manipulate textual string data using language/library functions for insertion, deletion, copying, and concatenation.
4. Demonstrate the use of message-passing/event-driven programming techniques in the construction of a program.
5. Demonstrate the use of debugging techniques in the creation of error-free programs.
6. Demonstrate the construction of a graphical user interface including menus, buttons, and fields with a visual development tool.
7. Use structured data types, including arrays, to appropriately represent structured data.
8. Demonstrate the ability to combine adv web development with programming to database interaction

Software
Students are required to have an authoring tool in order to create the course assignments. There are several available. This course will focus on using Adobe Dreamweaver since it is currently the industry standard. There are several free authoring tools one is called openElement. It is highly recommended that you get Dreamweaver through the Adobe Creative Cloud. Adobe Creative Cloud is available as a subscription service through Adobe with student pricing. The Creative Cloud contains all applications you will use through the degree program. Adobe is now offering Adobe Creative Cloud that provides access for a monthly fee. Adobe Creative Suite Design and Web Premium is available for student use in the LT ECRL at Discovery Park.

Note: If you are planning on taking more than one LT course (i.e. web authoring, computer graphics, media design, instructional systems design, etc.) we suggest that you subscribe to the Adobe Creative Cloud service which includes InDesign, Photoshop, Illustrator, Flash Professional, Dreamweaver, Fireworks, Acrobat, Premiere and more. It is less expensive to buy this subscription package that includes all the software than buy individual software licenses for each course.

PHP Web Server: The course will require that you download and install XAMPP to execute PHP scripts. Instructions for completing this are provided.

Grading
A total of 100 points for the course will be allocated as follows

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Quizzes</td>
<td>40</td>
</tr>
<tr>
<td>4 Assignments</td>
<td>40</td>
</tr>
<tr>
<td>Final Project</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

Letter grades will be the higher grade resulting from the following two standards:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>&gt;=90</td>
<td>Top 10%</td>
</tr>
<tr>
<td>B</td>
<td>&gt;=80&lt;90</td>
<td>Next 20%</td>
</tr>
<tr>
<td>C</td>
<td>&gt;=70&lt;80</td>
<td>Next 40%</td>
</tr>
<tr>
<td>D</td>
<td>&gt;=60&lt;70</td>
<td>Next 20%</td>
</tr>
<tr>
<td>F</td>
<td>&lt;=59</td>
<td>Last 10%</td>
</tr>
</tbody>
</table>
Homework

1. Homework will result in the development of web pages. Web pages are expected to contain the elements required in the assignment, have no broken links or broken code, look consistent, and use valid HTML. See the assignments for full details and requirements. Your choice of programming within the specs of the assignment.

2. This course uses a hybrid-mastery learning approach*. Thus, students get more than one opportunity to show that they can master the materials required in assignments. Students may choose to redo assignments that do not meet 100% of the assignment requirements at the due date.

- **Programming/Web Assignments**
  - Assignments are due on the date assigned.
  - Assignments that are not present (no pages) will be assigned a grade of 0 (zero) and cannot be redone.
    - Try to at least get the index.html page up so that you have the chance to complete the assignment on the subsequent redo.
  - Assignments that are present, but do not meet 100% of the requirements will be assigned a grade of 50% (grade points to be rounded down).
  - Students may elect to correct assignments and resubmit for a re-grade. Resubmits are available as follows:
    - Assignment 1, 2, 3 - two times
    - Assignment 4 - one time
    - Assignment 5 (final project) - no redo’s
  - All assignment redo’s must be resubmitted by the time of the next assignment due date, unless the student has made prior arrangements with the instructor.
  - Resubmitted homework when corrected and meets the assignment requirements will count 80% of the original points (grade points to be rounded down).
  - Resubmitted assignments are typically graded with the next due assignment, except for the final project assignment. There is no redo for the final project assignment.

- **Discussion Assignments**
  - Assignment Postings are due the day of the assignment due date. No redoes are allowed on assignment postings.
  - Replies to assignment postings can be made up to three days after the due date of the assignment.
  - Discussion postings can be made on or before the due date of the discussion assignment.

- **Quizzes**
  - Be sure to review the Canvas for dates and times for all Quizzes.
  - Any quiz not completed during the dates indicated will be assigned a grade of zero, unless the student has made prior arrangements with the instructor to take the quiz at a later time.

3. The final assignment or assignment redoes not turned in by the date of the final assignment/project will be assigned a grade of zero, unless the student has made prior arrangements with the instructor.

4. Students are encouraged to carefully check the logic and the output of their programs before submitting them for review and grading.

Class Attendance/Online Interaction

Participation and punctuality are professional behaviors expected. Educational or Instructional technology is not “doing computer projects” - it is much more. Hence, you need to be involved in class discussions and learning activities. Students may be dropped from the course, with notice from the instructor, due to lack of participation or non-attendance online.

Due dates, for all assigned materials, will be announced in advance. Changes, on the assignment's
requirements or due dates may be announced at later dates, in class forums, therefore reading the class forums is required. It is the student's responsibility to keep up with these updates and to have all assignments ready on time.

Mastery Learning Note
As discussed above, this class uses a hybrid mastery learning approach. As students take the course, they are given assignments which allow them to show their mastery of the materials being covered. In a pure mastery learning approach, we would hold off on proceeding to the next assignment until all students had shown mastery and at worst case, students falling behind would be held back until a later course. Since this isn't possible in a college course, this hybrid approach expects students to meet the goals of each assignment and then grades are assigned based on their mastery. Students can then decide if they wish to improve their mastery (as reflected in their grade) or continue on to the next assignment to show their level of mastery on the next assignments content. While the assignments build on one another, students can show less mastery in one assignment and still show better mastery in a proceeding assignment.

Online Interaction
This course depends on technology for its delivery. When a UNT system is unavailable or down, students should communicate the issue to the instructor as soon as they can. If the technology failure is local to the student and impacts their ability to submit an assignment or complete a quiz on time, they should contact the instructor during the outage as convenient using e-mail, text, or phone. Instructors will use their judgement on how best to resolve any technology issues in the course.

LT Incomplete Policy Statement
The department complies with university policy regarding the assignment of an Incomplete Grade in any course. Please see http://essc.unt.edu/registrar/academic-record-incomplete.html for information.

Per UNT policy, a grade of Incomplete can only be awarded to a student who is 1) passing the course and 2) has a justifiable and documented reason, beyond the control of the student, for not completing the course work on schedule. Notification and submission of documentation must be provided to the instructor at the time of the emergency.

Student Support
The University of North Texas provides student technical support in the use of Blackboard and supported resources. The student help desk may be reached at: Email: helpdesk@unt.edu Phone: 940.565-2324 In Person: Sage Hall, Room 130
Online: http://www.unt.edu/helpdesk/
Regular hours are maintained to provide support to students. Please refer to the website (http://www.unt.edu/helpdesk/hours.htm) for updated hours.

UNT is committed to providing a reliable online course system to all users. Students should immediately report any problems to the instructor and also contact the UNT Student Help Desk. The instructor and the UNT Student Help Desk will work with the student to resolve any issues at the earliest possible time.

Additional Resources
• UNT Portal: http://my.unt.edu
• UNT Library Information for Off-Campus Users: http://www.library.unt.edu/services
• UNT Computing and Information Technology Center: http://citc.unt.edu/services-solutions/students
• Computer Labs:
  General access computer lab information (including locations and hours of operation) can be located at: http://www.gacl.unt.edu/

COURSE COMMUNICATIONS

In this class, we will use online discussions to discuss concepts and topics found in the coursework. Remember to use the proper rules of netiquette when on the forum. There is a real person reading your posts on the other end of the internet connection, so please be respectful in your responses even when you disagree.
Resources regarding netiquette:
  • http://www.ic.sunysb.edu/Class/che326ff/discussion_board/etiquette.pdf
  • http://online.uwc.edu/technology/etiquette

COURSE EVALUATION

Students will be notified via email to complete the SPOT evaluation at the end of the semester.

SCHOLARLY EXPECTATIONS

Student Conduct and Academic Integrity

All works submitted for credit must be original works created by the scholar uniquely for the class. It is considered inappropriate and unethical, particularly at the graduate level, to make duplicate submissions of a single work for credit in multiple classes, unless specifically requested by the instructor. Work submitted at the graduate level is expected to demonstrate higher-order thinking skills and be of significantly higher quality than work produced at the undergraduate level. You are encouraged to become familiar with the university's Student Standards of Academic Integrity policy:
http://policy.unt.edu/sites/default/files/untpolicy/pdf/7-Student_Affairs-Academic_Integrity.pdf

Of particular interest are the following terms:

• **Cheating** – intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term academic exercise includes all forms of work submitted for credit or hours.
• **Plagiarism** – the deliberate adoption or reproduction of ideas, words, or statements of another person as one’s own without acknowledgement.
• **Fabrication** – intentional and unauthorized falsification or invention of any information or citation in an academic exercise.
• **Facilitating academic dishonesty** – intentionally or knowingly helping or attempting to help another to violate a provision of the institutional code of academic integrity.

**Copyright Notice**

Some or all of the materials on this course web site may be protected by copyright. Federal copyright law prohibits the reproduction, distribution, public performance, or public display of copyrighted materials without the express and written permission of the copyright owner, unless fair use or another exemption under copyright law applies. Additional copyright information may be located at: [http://copyright.unt.edu/](http://copyright.unt.edu/).

**UNT POLICIES**

**ADA Policy**

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Office of Disability Accommodation website at [http://www.unt.edu/oda](http://www.unt.edu/oda). You may also contact them by phone at 940.565.4323.

**Add/Drop Policy**

The department adheres to the add/drop schedule established and published by the UNT Office of the Registrar. See the registration calendar for information ([http://registrar.unt.edu/registration/registration-guides-by-semester](http://registrar.unt.edu/registration/registration-guides-by-semester)).

**Student Conduct and Discipline**

You are encouraged to become familiar with the University Student Code of Conduct maintained by the Dean of Students in the Office of Student Affairs: [https://deanofstudents.unt.edu/conduct](https://deanofstudents.unt.edu/conduct).

**Important Notice for F-1 Students taking Distance Education Courses: Federal Regulation**

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the Electronic Code of Federal Regulations website at [http://www.ecfr.gov](http://www.ecfr.gov). The specific portion concerning distance education courses is located at "Title 8 CFR 214.2 Paragraph (f) (6) (i) (G)" and can be found buried within this document: [http://frwebgate.access.gpo.gov/cgi-bin/get-cfr.cgi?TITLE=8&PART=214&SECTION=2&TYPE=TEXT](http://frwebgate.access.gpo.gov/cgi-bin/get-cfr.cgi?TITLE=8&PART=214&SECTION=2&TYPE=TEXT).
The paragraph reads:
(G) For F–1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F–1 student’s course of study is in a language study program, no on-line or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course. If such an on-campus activity is required, it is the student's responsibility to do the following:

(1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
(2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, s/he should contact the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.