# MIS2402 – Data Centric Application Development Fall 2019

## About the Instructor:

Prof. Taha Havakhor (taha.havakhor@temple.edu) 201C Speakman Hall Phone: (215) 204-6945 Profile: <u>http://community.mis.temple.edu/thavakhor</u> Regular Office hours:

- 3:00 pm to 6:00 pm, Wednesdays and Thursdays, in Speakman 201C
- Office hours are in effect 8/27/2019 through 12/6/2019
- Other times by appointment
- Be sure to use a subject line of "MIS2402-Sec004" when emailing the instructor

ITA: To get help from an ITA see the class web site (right column, under "Instructor Office Hours").

# **Class Locations and Time:**

5:30pm to 8:00pm, Tuesdays, in Alter Hall 602

On the web: https://community.mis.temple.edu/mis2402sec004fall2019

## **Prerequisites:**

MIS2102/2901. MIS2502 in the same or prior semester. Prior programming and/or web development experience is advantageous, but not required.

# **Course Description:**

The ability to program in any language is a great asset to any person working in IT, regardless of his/her chosen area of expertise. Likewise, the Internet is a pervasive element in all IT solutions. Consequently, an understanding of the underlying protocols of the Internet and how web applications work is advantageous to any IT professional.

This hands-on programming course uses open source software to provide students with an understanding of programming fundamentals. This class is designed to develop individual proficiency and reward individual achievement as students develop the skills necessary to create solutions that interact with web APIs.

In order to develop a web application, the student must develop competency in a number of different technologies, and ultimately use them in concert to create a whole solution. This class is structured so that individual technologies are introduced, and then combined to create increasingly more sophisticated results.

## **Course Objectives:**

- Learn and apply the basic principles common to all programming languages (e.g., variables, algebraic expressions, logical expressions, if/else statements, loops, functions, arrays, and objects) using JavaScript.
- Develop the logical thinking skills to be able to break down tasks into component steps and express those steps in code.
- Be able to use debugging tools to identify problems with the code.
- Learn the basic structure and syntax of HTML5, CSS, and JavaScript. Be able to use and combine these languages to present a complete solution.
- Get an understanding of client/server interactions.
- Be able to use Web APIs and related protocols to send and retrieve data.
- Observe and learn the basic syntax of the HTTP protocol necessary to send and retrieve data from an API.
- Explain the concept of a Single Page Architecture. Use simple jQuery commands to implement a simple Single Page Architecture.
- Be able to handle and validate user input via HTML forms.
- Learn how to use tools (i.e. libraries/frameworks) that can speed and simplify application development, e.g. Bootstrap, and jQuery.
- Build an application that takes advantage of an existing CSS theme
- Get an understanding of a Serialization process, e.g. via JSON.
- Demonstrate the ability to get the data from multiple third-party APIs and use it in the Web Application.

## **Textbook and Materials:**

There is no textbook for this course. The following resource will be used to supplement classroom instruction.

Online resource: https://lynda.temple.edu

## **Evaluation and Grading:**

Item	Percentage
Quiz 1	15%
Quiz 2	15%
Exam 1	25%
Exam 2	25%
Assignments	10%
Participation /	10%
Attendance	

Scale				
94 - 100	А	73 – 76	С	
90 - 93	A-	70 – 72	C-	
87 – 89	B+	67 – 69	D+	
83 - 86	В	63 – 66	D	
80 - 82	В-	60 - 62	D-	
77 – 79	C+	Below 60	F	
Students who fail to earn the required MIS				
PRO points will receive an "Incomplete" for				
this course regardless of performance on				
exams or class participation! See the MIS				
Department PRO Points Requirement section				
of this document for details.				

Grades are always communicated to the student as a percentage – i.e. on a scale of 0 to 100.

Once a grade is communicated electronically students have a 2-week window of time in which they may approach the instructor during office hours and question the grade received. Grade adjustments will not be considered after this window has closed. Of course, during the last week of the semester, study days, and finals week, the 2-week window may shorten. Grade adjustments will not be considered 48 hours after the last day of final exams.

## **Exams and Quizzes:**

There will be two quizzes and two exams during the semester. The dates of these are documented in the class schedule. There will be no impromptu ('pop') quizzes or exams.

Exams are hands-on technical exercises completed in a fixed amount of time. The instructor will provide references that the student may use during the exam. Exams are conducted in class, and you must use a workstation in the classroom to complete the exam. No other electronic device is to be used for the exams and/or quizzes.

Quizzes are closed book, closed notes assessments given in class. Students are expected to memorize basic command syntax and write short portions of code by hand.

Make-up exams/quizzes will not be given. Exceptions are reserved for documented hospitalization or other extreme circumstances. If an exception is made, students may find the content of the make-up exam or quiz to be more difficult than the original. It is, therefore, to the student's advantage to show up for the exam or quiz at the scheduled time and take it with the rest of the class.

## Attendance and Participation:

Attendance and participation are essential. Students can miss up to 3 classes for any reason without detriment to their attendance grade.

#### MIS2402 Syllabus

After three absences a student's attendance grade will drop as follows: A student with 3 or fewer absences receives 100% attendance credit. A student with 4 to 7 absences receives 50% attendance credit. A student with 8 or more absences receives 0% attendance credit.

In order to track attendance, a sign in sheet will be distributed at the start of each class. Any attempt to sign in on behalf of another student will be treated as a case of academic dishonesty and will have serious consequences for both students. See the "Plagiarism and Academic Dishonesty" portion of the syllabus for details.

If a student does miss class, it is the student's responsibility to catch up if class is missed. While every student is encouraged to use office hours to gain a better understanding of class material, office hours are NOT for helping students catch up on material they missed because they were absent.

Finally, please be advised that the instructor may, at his/her discretion, deduct additional points from the attendance/participation grade of a student. A student who consistently fails to contribute to course-related conversation or who engages in classroom conduct that impedes the learning of other student can expect such a point deduction. This deduction will be applied at the sole discretion of the instructor, and without warning. This deduction may be applied to any student, regardless of the student's documented attendance record.

If this attendance policy presents a hardship due to illness or other dire circumstance, please inform the instructor and provide any requested documentation. Exceptions to the attendance policy are possible, but not likely.

## **Extra Credit and Curved Grading:**

Extra credit opportunities will not be offered as a way to compensate for poor academic performance earlier in the semester.

Individual exams and quizzes are not curved. A single curve to the overall numeric grades for the class may be applied at the end of the semester, after all quizzes and exams are completed, in order to conform the class to the GPA distribution expected by the school. *There is no guarantee that such a curve will be applied.* 

## **Assignments:**

Throughout the semester assignments will be provided to compliment classroom instruction. These *assignments will be graded.* There will be 10 graded assignments provided in the semester. Assignments typically begin as in-class activities. The assignment is begun in class with assistance from the instructor and the student is then left to complete the assignment independently.

Completing the assignments, as an individual, is the best way to prepare for the quizzes and exams.

Assignments typically conclude with the instruction to "upload your work to the class server." You must upload your work to the class server to receive credit for it. Work submitted any other way (e.g. email) will not be graded.

Any assignment uploaded to the class server before the assigned due date/time will be treated as "on time" and will be graded accordingly. Assignments uploaded within the 48 hours after the due date will receive a %20 late penalty. Assignments uploaded after this 48-hour grace period will receive a grade of zero and will not be graded.

Assignment solutions will not be provided by the instructor. However, assignment solutions may be reviewed in class, and/or also presented via video. Students who encounter difficulty with a particular assignment are encouraged follow along with the solution video or class capture, typing as they go.

# **Plagiarism and Academic Dishonesty:**

It is important to do your own work, and to not present the work of others as if it were your own. Cheating and plagiarism will not be tolerated in this class.

This zero-tolerance policy applies to class attendance tracking as well. Any attempt to impersonate the identity of another student on the class attendance sheet will result in both students being penalized.

Likewise, any attempt to deliberately interfere with the technology used in this class (e.g. the class server), or to electronically impersonate a student other than yourself, or to knowingly share your credentials with another student for the purpose of sharing your work, will also be treated as a case of academic dishonesty. All students involved in such events or activities will be penalized.

Penalties for such actions range from a failing grade in the entire course to expulsion from the program. Instances of cheating and plagiarism are *very* likely to be reported to the University Disciplinary Committee.

# **Disability Disclosure Statement:**

Any student who has a need for accommodation based on the impact of a documented disability, including special accommodations for access to technology resources and electronic instructional materials required for the course, should contact the instructor privately to discuss the specific situation by the end of the second week of classes or as soon as practical. Students should contact Disability Resources and Services (DRS) at 215-204-1280 in 100 Ritter Annex to learn more about the available resources. The instructor will work with DRS to coordinate reasonable accommodations for all students with documented disabilities.

# **Student and Faculty Academic Rights and Responsibilities:**

The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02) which can be accessed through the following link: http://policies.temple.edu/getdoc.asp?policy\_no=03.70.02

# **MIS Department PRO Points Requirement:**

The MIS Department has instituted a PRO points (professional achievement points) requirement for all MIS majors. This class is a checkpoint to ensure that students are focused on this requirement and on track to earn their 1,000 points by graduation. Students in MIS2402 must earn a minimum of 200 points by the end of the

semester. Students who fail to earn the required points will receive an "Incomplete" for this course regardless of performance on exams or class participation.

**IMPORTANT NOTE:** If a student fails to earn the minimum number of PRO points within one year from the end of the semester or does not notify their instructor that they have earned the minimum number of points, then their "Incomplete" will be changed to an "F" automatically. The grade of "F" will then be the student's permanent grade.

Students are **STRONGLY** encouraged to, at a minimum, do the following to earn points:

- 1. Create an e-Portfolio and have it listed with the department.
- 2. Become an active member of AIS and participate in professional development activities.
- 3. Attend the IT Awards Reception (spring semester only).
- 4. Participate in the Data Analytics Challenge (fall semester only) and the MIS Department's Career Fair.
- 5. Volunteer your time for department-sponsored events.
- 6. Discuss opportunities to earn MIS PRO points for projects with your MIS instructors. Note that students may not request course/project related PRO points more than one year after the end of the semester.

Finally, here are two excellent resources that describe why the MIS professional achievement points are important to you.

- 1. <u>http://community.mis.temple.edu/current-students/professionalachievement</u>
- 2. <u>http://community.mis.temple.edu/store</u>

#### **Before Class Begins:**

The semester will move quickly. **Before** the first day of class students are install the software we are using and watch some portions of a lynda.temple.edu video as assigned by the instructor. Relevant documentation can be found on the class blog. Installation instructions are provided for both Mac and PC platforms. However, please be advised that instructional materials are written primarily with PC / Windows users in mind.

#### Lynda Training:

Visit lynda.temple.edu for access to the following:

- HTML Essential Training w/ James Williamson
- Creating Forms w/ Clarissa Peterson
- HTTP Essential Training w/ Morten Rand-Hendriksen

Students may wish to use dual screens and/or stream the Lynda videos on a tablet and work on a PC next to the tablet. This can dramatically increase productivity.

Students are required to purchase a USB drive, so that they can easily transfer their work from the class computers to their personal equipment. A 16GB USB drive can be purchased from the Temple OwlTech store for approximately \$10.

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# **Getting Help**

Students who wish to contact the instructor or the class ITA via email should use a simple subject line of "MIS2402". Students who do this can expect to receive a response from the instructor by the end of the next business day.

Please be advised that email correspondence is not an ideal way to trouble-shoot / resolve a technical problem. In-person meetings are usually much more productive.

Students who need assistance are encouraged to do the following

- 1. Visit the instructor during office hours
- 2. Schedule a session with the ITA (These are first come, first serve, and subject to the ITA's availability)
- 3. Visit the MIS Coding Help Desk (See the class web site for details.)

# Schedule:

The following link presents a tentative schedule: <u>https://community.mis.temple.edu/mis2402sec004fall2019/schedule/</u>

## \*\*\*For MIS Majors\*\*\*

# 2019 IT Career Fair - September 10, 2019

The Institute for Business and Information Technology (IBIT) is holding the Fox IT Career Fair on September 10, 2019 (Tuesday) from 11am-3pm in the Howard Gittis Student Center, Room 200. Over <u>25 leading companies</u>, including NBCUniversal, Pfizer, AmerisourceBergen, Scholastic, Protiviti, GlaxoSmithKline, RSM, and TD Bank will specifically **recruit for** both <u>full-time</u> and <u>internship positions</u> for BBA MIS, MS ITACS, and MS DIM students. See: <u>http://ibit.temple.edu/careerfair</u>.

To attend you need to complete the following:

1. An approved e-portfolio listed on the MIS Community e-portfolio platform at: <u>http://community.mis.temple.edu/pro</u>

2. Register at <u>https://ibit.temple.edu/registration</u> by <u>September 2, 2019</u> (Monday). Only registered students can participate in the career fair.

Employers participating in the career fair will receive access to the MIS e-portfolio search engine at <a href="http://community.mis.temple.edu/professionalachievement/search">http://community.mis.temple.edu/professionalachievement/search</a>. It is important to keep your profile up-to-date as the site only displays students who have an avatar and employers may search for you by program, type of job interest, or graduation date. Make sure that your resume and e-portfolio are consistent; interested employers will likely follow up by checking your e-portfolio. Finally, include your e-portfolio URL in your email signature and on your resume.

#### **Benefits include:**

- \* Direct access to companies eager to meet them
- \* Learn about different jobs in IT
- \* Build their network by meeting IT professionals
- \* 50 PRO points