ISTE-646 Foundations of Web Technology II Spring 2023 (2225) Course Syllabus

REMINDER: The information presented in this syllabus is subject to expansion, change, or modification during the semester.

Instructor: John-Paul Takats My Office: Room 70-2669 Office Hours: Please find hour

information here -

https://people.rit.edu/~jxtadm/

Class Meeting Times *

Mondays 5:00 – 7:50pm

*ATTENDANCE IS EXPECTED AT ALL LECTURES

I've taught this class many times and those who miss several classes rarely succeed. Information I present in class may NOT always be available digitally in mycourses; and those tidbits are fair game for quizzes, assignments, etc. Obviously if you are sick or have an emergency you can miss class, but plan on talking to myself, a TA, or a classmate to get caught back up. Please read more about this below in the *Student Attendance and Responsibilities* section.

Important RIT Deadlines

- ◆ Last day of add/drop is January 24 (Tuesday)
- ◆ Last day to withdraw with a grade of "W" is *April 7 (Friday)*
- ◆ Academic Calendar Link: https://www.rit.edu/calendar

NOTE: iSchool policy states that a student has one semester to challenge any grade. After that, grades cannot be challenged.

Course description

This course builds on the basics of web page development that are presented in ISTE 645 and extends that knowledge to focus on theories, issues, and technologies related to the design and development of web sites. An overview of web design concepts, including usability, accessibility, information architecture, and graphic design in the context of the web will be covered. Introduction to web site technologies, including HTTP, web client and server programming, and dynamic page generation from a database also will be explored. Development exercises are required. (Prerequisite: ISTE-645).

Important note for students: All prerequisite knowledge applies to all students. You should be familiar with basic HTML5 coding (using text editors!), CSS3 (both textual and positioning manipulation), web graphics creation/optimization, basic design principles for the web, and UNIX commands for creating, deleting, renaming, and changing permissions for files and directories.

Student Learning Outcomes

At the end of the course, the student will be able to	Assessment Method
Demonstrate proficiency in web site design, planning and documentation as part of a team	Team written design document
Use information design, graphics, and markup languages to create medium scale web sites.	Exercises, individual and group projects, and practical exams
Use client side programming such as JavaScript and the document object model to create dynamic and interactive web pages	Exercises, individual and group projects, and practical exams
Use server side programming and databases to improve site performance, modularization, and separation of logic from data.	Exercises, individual and group projects, and practical exams.
Use the HTTP protocol to properly submit, validate and process user input data	Exercises, practical exams, and projects

Course Text and Material

There is **no required textbook** for this course. All required readings are from digital media and will be linked or posted on MyCourses. Many readings will be on the W3Schools and you are responsible for looking up more comprehensive syntax for HTML5 and CSS3.

Grading

Your final grade will be assessed based on the following graded Items:

Grade item	% of overall grade
Exercises (homework)	20%
Individual Project (due at midterm and end of term)	15% and 15% respectively
Group Project (Design Document & Site)	15% and 15% respectively
Participation (detailed below)	5%
Final Practical Exam (given during final exam week)	15%
Total	100%

Letter grades correspond to the following percentages and Grade Points:

Grade	Percentage
Α	94.00—100.00
A-	90.00—93.99
B+	87.00—89.99
В	83.00—86.99
B-	80.00—82.99
C+	77.00—79.99
С	73.00—76.99
C-	70.00—72.99
D	60.00—69.99
F	0.00—59.99

It is important to understand that if you complete all the bare minimum requirements for an assignment, that may only sufficient for a grade of "C", possibly "B" (i.e. "satisfactory work"). To receive an "A" for an assignment, you must go show creativity, initiative, and excellence. The grade of "A" is intended for work that is clearly superior, rather than average.

Grading Guidelines

The following will be looked for in all of your assignments:

- Clean, standards-compliant HTML and CSS (passes W3C validator checks).
- Documentation, documentation (read: copious code comments)
- Citations to code sources (if you use code from somewhere else, you must cite the source!!)
- Quality content and design. This course is NOT just about coding. The design and content
 of your sites will count heavily toward your grades.
- Technology implementation

Other Grading Notes

- Unless otherwise noted, all submissions to the myCourses dropbox must include the URL to the assignment in the dropbox comments. Failure to include the URL will result in an automatic 5% deduction for that assignment.
- All files submitted to the myCourses dropbox must be saved in ONE zip file before submission – even if there is only ONE file to submit.
- **Do not submit** rar, gz, or 7z files; doing so will result in an automatic 5% deduction for that assignment.

Exercises / Homeworks

Exercises will be discussed in class and posted in myCourses. They will always be due at 11:59pm on the due date. Almost all exercises are web pages, so they MUST be up and viewable on the web using an RIT server in the specified directories. That means you will also submit a URL to your website. Once you are finished with the exercise, please do NOT modify it in any way until it has been graded, else you will receive a 0 grade for the exercise. Exercises are generally submitted in a zipped file (use a zip file,

NOT a rar, gz, or 7z file) and dropped to a drop box in **myCourses**. In addition, **you will include a link to the completed exercise in the comment section of the dropbox**. Broken or incorrect links will be considered a late assignment and points will be deducted.

Late Policy for Exercises

In order to receive full credit for exercises, the work must be submitted on time. The MyCourses dropbox will record the time you submit your exercise. DO NOT EMAIL ME YOUR EXERCISE IF YOU ARE LATE. The myCourses timestamp will be considered the official submission time for all assignments.

The maximum grade for late homework will decrease by 10% for each day it's late. A perfect project submitted one day late would receive a 90%; two days late, 80%.

Assignments more than two calendar days late will receive a grade of 0%. The drop box closes after two calendar days late, take the zero and get the next assignment in on time!!! DO NOT ASK ME TO GIVE YOU AN EXTENSION ON THE DUE DATE!

Projects

There are two significant projects to complete in this course. One project is something you will create independently. Another is a team project. Both projects will have a midterm, and a final due date. The Team project will be presented to the class or me at midterm and near the end of the semester. The complete details for both projects will be discussed in class. Students should expect to spend a significant amount of time outside of class working on these projects. **Projects more than two calendar days late will receive a grade of 0%.**

Final Exam

There will be one practical exam given at the end of the semester to assess your knowledge and skills. It will be based on the in-class exercises. The practical is designed to show that you personally can do minimally competent work in creating a page using HTML5, CSS3, JavaScript, and PHP w/Database connectivity. "Minimally competent" means: (1) the code is valid & well formed, (2) the CSS does what it is supposed to do, (3) the JavaScript adds the functionality it is supposed to add to the page, and (4) the PHP does what it is supposed to do as well as connect to a database using secure methods like MySQLi.

Missing the final practical will result in a grade of F for the course unless you contact the instructor at least 24 hours in advance of the exam. If your reason is valid (documentation is required), you will be allowed to take a different 'make-up' exam before the end of finals week.

Student Attendance and Responsibilities

As a student at RIT, you are expected to attend all lectures. You are also expected to fully participate in all course/class discussions and activities. Your actions in the classroom (and in the lab) should reflect the standards of behavior expected in a professional environment: you will be respectful of the professor, your classmates, and any course support personnel (i.e., teaching



assistants, note-takers, interpreters, etc.). You should also be prepared and willing to fully participate in classroom activities when asked to do so.

You should not be talking to another student while the instructor is speaking; but please ask questions whenever needed! Typically after the lecture you will be given time to work on an assignment. Quiet discussion and conversation is fine (and encouraged).

Excessively checking your email, playing games, surfing the web, or working on assignments during lectures can have negative impacts:

- Performing more than one task at the same time is difficult. While you are paying attention to the computer, you are likely missing out on the content of the lecture.
- You are also distracting neighboring students.
- If your computer screen is visible to the hallway, your behavior is broadcast to a broader audience (students, faculty, administrators, visiting parents, ...) and reflects poorly, especially on you.

Violations of these classroom behavior policies will be dealt with through deductions in your participation grade.

Participation Grade Metric (5%)

NEW ADDITION FOR SPRING 2023. Firstly, these should be easy almost free points assuming you come to class regularly and participate. So, in theory if you do this you are actually get 5 free points that were never offered in previous semester so I hope people see this more as a benefit than a burden.

I have consistently observed that students who follow along during our class demos do much better. Additionally, this is a lab-based active learning classroom so this is already expected. However, finding a way to incentivize attending class and trying out code during class is something I am trying out this semester.

Since it is a pilot, I will be very lenient in giving people the full 5%, but there still will be a few things you need to do.

I will create assignments dropboxes in mycourses for our class days that we do code demos and other in class activities. At the end of the class you simply need to zip and submit what you have done in class. The code doesn't actually have to work or be perfect, I simply want to see a demonstration that you have made some effort to follow along and experiment. I anticipate that most people who submit something will get the points regardless of how complete it is during this pilot.

At the end of the semester I will calculate exactly how to give out these points. Likely I will allow people to miss a few of these participations and still get the full 5% but since this is a pilot and I am not sure how many of these will we will have in the end I still need to figure out the exact formula. I will keep everyone informed throughout the semester on the logistics of this and what to expect.

Email Contact Information

Professor to Student Communication: Any updates to assignments and any emails that I need to send to individual students will be done through myCourses (you can set up mycourses to notify you of announcements in MyCourses via email). This means is that you should check your email/course announcement stream in MyCourses daily.

Student to Professor Communication: To separate your email from spam, start your email subject with "ISTE646". You should get a reply to any email you send me within two days. If you need a reply sooner, please let me know in the subject by stating "urgent" or something like that; or try my office hours if available sooner.

Academic Integrity

Please review the institute policy on academic integrity as described here.

Schedule

The estimated course schedule is below. All dates, lecture topics, and assignments are subject to reasonable change at the discretion of your instructor. Any changes will be announced.

WEEK	TOPICS COVERED	Activities
1	Web and Mobile Design Trends	Ex01 – Web Page (Due Sunday @ 11:59PM)
2	CSSPositioningandResponsiveDesign Individual Project Discussion	Ex02 – CSSPos (Due Sunday @ 11:59PM)
3	Forms, Menus and Bootstrap	Ex03 – FormV1 (Due Sunday @ 11:59PM)
4	JavaScript and Forms	Ex04 – FormV2 (Due Sunday @ 11:59PM)
5-6	JavaScript – Functions and Images	Ex05 – FormV3 (Due Sunday @ 11:59PM)
7	DHTML with JavaScript	Team Design Document Due
8-9	Intro to PHP, Forms, .htaccess	Individual Project 1 Due Ex06 – PHP/Forms (Due Sunday @ 11:59PM)
10-11	PHP, Database, Logins	Ex07 – PHP/MySQL (Due Sunday @ 11:59PM)
12-14	AJAX & Information Assurance	Individual Project – Final Version
14		Final Group Presentations
Finals	Final Practical	

Statement on Reasonable Accommodations

RIT is committed to providing reasonable accommodations to students with disabilities. If you would like to request accommodations such as special seating or testing modifications due to a disability, please contact the Disability Services Office. It is located in the Student Alumni Union, Room 1150; the Web site is www.rit.edu/dso. After you receive accommodation approval, it is imperative that you see me during office hours so that we can work out whatever arrangement is necessary.