

# ISTE.645 – Foundations of Web Technologies I

## Fall 2023 (2231) Course Syllabus

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

**Instructor:** John-Paul Takats

**Office Hours:**

Please find hour information at

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

**Phone:** 585-475-7031

**Office:** Golisano Building - Office #2669

**More on office Hours:**

Oftentimes the best way to get help besides visiting the TA and other tutors will be my office hours; rather than back and forth emails. Use the link in the left column to view the latest up to date schedule as it changes sometimes in the first week. There are zoom and in person options available

**ATTENDANCE IS EXPECTED AT ALL LECTURES - unless sick or other type of emergency. There is some content that is only discussed in class so if you miss class you may miss important information.**

### Course description

This class provides an introduction to internet and web technologies. Topics include an introduction to the internet and basic internet technologies (including, but not limited to: SSH, SFTP, UNIX, XHTML, CSS, Client-Side programming, and website publishing)

### Student Support Availability

Success in this course depends heavily on your personal health and wellbeing. Recognize that stress is an expected part of the college experience, and it often can be compounded by unexpected setbacks or life changes outside the classroom. Your other instructors and I strongly encourage you to reframe challenges as an unavoidable pathway to success. Reflect on your role in taking care of yourself throughout the term, before the demands of exams and projects reach their peak. Please feel free to reach out to me about any difficulty you may be having that may impact your performance in this course as soon as it occurs and before it becomes unmanageable. In addition to your academic advisor, I strongly encourage you to contact the many other support services on campus that stand ready to assist you. These include the Academic Success Center, College Restoration Program, Disability Services, English Language Center, Higher Education Opportunity Program, Spectrum Support program, and TRiO Support Services. Students can find out about specific services and programs on the Student Affairs Website.

## AI Policy

Using software tools to generate all or part of a solution to a **homework assignment** is a violation of the Academic Integrity Policy.

- The penalty for the first such violation is a 0 on the assignment.
- Any subsequent violations will result in an F in the course.

Using software tools to generate all or part of a solution to a **practical exam** is considered an egregious violation of the Academic Integrity Policy.

- The penalty for an egregious violation is an automatic F in the course, even if it is the first violation.

*Why?* I am not anti-AI, but want to ensure you know the fundamentals of web and development without relying on these tools. I have found that if people use these early on they become dependent on them. Practice is key to mastering these skills, I want to help you all become the best developers you can be, not simply experts at using AI tools. Students who rely on AI Code Generation to complete their homework assignments will also be unprepared for practical exams and future RIT courses. More details on academic dishonesty can be found later on in the Syllabus.

## Important RIT Deadlines

- ◆ Last day of add/drop is **September 5 (Tuesday)**
- ◆ Last day to withdraw with a grade of “W” is **November 10 (Friday)**
- ◆ *Academic Calendar Link:* <https://www.rit.edu/calendar>

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

## Prerequisites

- Ability to use a web browser
- Ability to use a text editor/word processing software
- No prior programming languages experience is expected, but having some may be helpful

## Learning Outcomes

Upon course completion, a student will have a working knowledge of:

- Key individuals and events in the development of the Internet and World Wide Web
- Internet search techniques
- Internet protocols and tools, including SSH and SFTP
- Basic Unix file and directory management tasks
- Digital content types, including file formats, resolution, color models, and compression
- Imaging software to create graphic elements and composite images
- HTML and CSS web page coding

- How to identify and implement basic graphic design principles including contrast, alignment, proximity, repetition, and effective use of color and type
- Cross-browser addressing issues

By the end of the semester, students will be able to:

- build a multi-page web site with embedded graphics and media
- apply appropriate design principles to a site structure and its functionality
- create/modify graphics for web site inclusion
- install websites on a server

### Topics Covered:

<ul style="list-style-type: none"> <li>● HTML and CSS</li> <li>● Copyright and Intellectual Property</li> <li>● Validation</li> <li>● Plagiarism</li> <li>● Web History</li> <li>● Design Basics</li> <li>● UNIX</li> <li>● User Experience and Usability</li> </ul>	<ul style="list-style-type: none"> <li>● Image Creation/Manipulation</li> <li>● CSS Grid</li> <li>● SSH</li> <li>● Introduction to JavaScript</li> <li>● Internet Searches</li> <li>● Introduction to PHP</li> <li>● Responsive Web Design</li> <li>● SFTP</li> </ul>
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## Textbook

**Zybook (a virtual textbook)** - Web and Mobile Development. ISBN/LINK WILL BE ADDED HERE. Readings, and several weekly activities will be conducted directly inside the ZyBook website so joining and participating on ZyBooks is required!

Additional materials:

**Web Development Tutorials:** <http://www.w3schools.com>

**HTML Validator:** <http://validator.w3.org/>

**CSS Validator:** <http://jigsaw.w3.org/css-validator/>

## Saving work-in-progress

File backup is critically important. Bring a storage medium (USB Flash drive/memory stick) to every class or be sure to upload all work to the cloud if preferred. Clearly mark a name on the USB device. Include a simple text file with name and contact information. Media devices left in the classroom are turned in to the Dean's office "lost & found."

Losing data is not a valid reason to ask for an extension.

## Attendance and Responsibilities

Attendance is expected at *all* lectures. There is a strong, positive correlation between students who attend class regularly and the final grade those students receive. Exceptions are made for school-related/sponsored activities; arrangements made in advance. All other absences require documentation.

Participation in class discussions and activities are strongly encouraged. Student conduct in the classroom and IST open lab (GOL-2670) should reflect the standards of behavior expected in a professional environment. RIT strongly supports a culture of professionalism and pluralism. Be respectful of the professor, classmates, and course support personnel (i.e., teaching assistants, note-takers, interpreters, etc.). Be prepared and willing to fully participate in classroom activities when asked to do so.

If a student must miss a class, it is their responsibility to find out what happened during the missed class and to make up any work related to that class. All RIT students are required to review, understand and abide by the general student responsibilities on the *RIT Center for Student Conduct and Conflict Resolution*:  
<http://www.rit.edu/studentaffairs/studentconduct/>

## Classroom Policies

To ensure a comfortable learning classroom environment for all:

- Out of courtesy to everyone in the classroom, ***turn ringers off for cell phones and/or any other electronic devices***. If a phone call ***absolutely must*** be taken during the class period due to an urgent personal or professional emergency, please step into the hallway first.
- Please bring your own materials to class. This means, obviously, pens, paper, textbooks, etc. as well as the above-mentioned storage media.
- Please keep to a minimum during class the use of your workstation for Instant Messaging, web surfing (back-channeling), game playing, shopping, personal email, etc. The professor has a responsibility to help students learn this course's content, but cannot satisfy that responsibility if students do not pay attention. Remember, use of the workstation for non-course-related activities can be extremely distracting to neighboring students.
- Please arrive on time for class and plan to stay for the entire class session.

## Course Communication

***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). What this means is that you should **check your email/course announcement stream in MyCourses daily**. If you forward your RIT email to another account, you are responsible for making sure email forwarding continues to work throughout the semester

***Student to Professor Communication:*** To separate your email from spam or the influx of message center emails I ask that you start your email subject with “ISTE240”. 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 the better bet may be to try my office hours if available sooner.

## Academic Integrity

As an institution of higher learning, RIT expects students to behave honestly and ethically at all times, especially when submitting work for evaluation in conjunction with any course or degree requirement. The School of Information encourages all students to become familiar with the RIT Honor Code and with RIT's Academic Integrity Policy.

Please review the institute policy on academic integrity as described on the RIT website at: <https://www.rit.edu/policies/d080>

Also make sure to read the AI policy on the first page of this syllabus.

## Statement on Academic Accommodations

RIT is committed to providing academic accommodations to students with disabilities. If you would like to request academic accommodations such as testing modifications due to a disability, please contact the Disability Services Office. Contact information for the DSO and information about how to request accommodations can be found at [www.rit.edu/dso](http://www.rit.edu/dso). After you receive academic accommodation approval, it is imperative that you contact me as early as possible so that we can work out whatever arrangement is necessary.

## Respect for Diversity

It is my intent that students from all diverse backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know ways to improve the effectiveness of the course for you personally or for other students or student groups. In addition, if any of our class meetings conflict with your religious events, please let me know so that we can make arrangements for you.

## Grading

(these are estimated and subject to slight variations... will become more locked down on start of course)

Component	Point Value
Weekly ZyBook Readings "Participation activities" *	10 %
ZyBook Challenge Activities	10%
Homeworks / Labs (either ZyLabs or other exercises in MyCourses assigned periodically)	15%
Project 1 **	15 %
Project 2 **	15 %
Discussions ***	10 %
Midterm Written Exam	5 %
Midterm Practical Exam	5 %
Final Written Exam	5 %
Final Practical Exam	5%

Range	Grade
$\geq 93.0\%$	A
$\geq 90.0\% \ \& \ < 93.0\%$	A-
$\geq 87.0\% \ \& \ < 90.0\%$	B+
$\geq 83.0\% \ \& \ < 87.0\%$	B
$\geq 80.0\% \ \& \ < 83.0\%$	B-
$\geq 77.0\% \ \& \ < 80.0\%$	C+
$\geq 73.0\% \ \& \ < 77.0\%$	C
$\geq 70.0\% \ \& \ < 73.0\%$	C-
$\geq 60.0\% \ \& \ < 70.0\%$	D
$< 60.0\%$	F

\* Weekly readings are assessed by tracking who logs in, and who completes the basic little exercises in each reading. These exercises are super easy and you can keep trying until you pass; you just have to do these on time each week to get credit.

\*\* Project 1 and Project 2 may have individual deliverables (part 1, part 2 etc) details to come.

\*\*\* Discussions will be conducted on either Slack or the MyCourses Discussion board

## Exams

The midterm and the final exams are given in two parts and on two separate days; an online exam via myCourses, and a practical exam requiring a web page creation. so in total 4 exams:

1. Midterm written exam (multiple choice, true / false)
2. Midterm Practical
3. Final written exam (multiple choice, true / false)
4. Final Practical

## Practical Exams

There will be two practical exams given to assess your knowledge and skills; one around midterms. The other around Finals week. 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 HTML and CSS..

Closer to the practical exam, the instructor will discuss what resources you

are allowed to use during the exam, and if you will be required to use the lab machines or a personal machine.

Missing the Final practical exam 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),

### Exams (true false / multiple choice)

In addition to the practical exams there will also be two traditional exams with true / false and multiple choice style questions. One around midterms. The other around Finals week.

### Exam/Practicum Policies

Students must attend all scheduled exams. Policies for exams (subject to change) are listed below:

- Students must participate in exams at the scheduled times. Students travelling on university-sanctioned activities must request an alternate date one week in advance.
- A student who must take the exam at a different time for reasons other than university-sanctioned activities must submit a request at least 48 hours in advance. These requests are granted only under exceptional circumstances and require supporting documentation.
- A missed exam is graded zero (0) unless prior special arrangements have been approved.
- If the final exam for this course conflicts with another final exam, please see the professor as soon as possible before exam week! Check the SIS exam schedule to determine the final exams schedule.
- RIT policy states that a student is not required to participate in more than two (2) final exams on any given day. A student with three (3) or more final exams scheduled on the same date, should contact all involved professors to schedule alternate dates/times.
- A *bona fide* documented emergency that prevents a student from attending the final exam or final practicum results in a course grade of "I" (incomplete). A makeup exam will then be scheduled no later than the first week of the next term. At that time, the incomplete grade will be changed based on the makeup and the current semester's work.

### Exam Resource Allowed

Normally in the class before an exam we will conduct an exam review and discuss the logistics of the exam. The professor will also discuss at that point what resources will be allowed. In some instances an exam may or may not be an open note, crib sheet; this will be discussed in prior classes.

## Class Projects

Projects will always be discussed in class; but there will be a minimum of 2 projects broken up in several deliverables. Electronic versions of the projects will be posted in myCourses. Projects are evaluated once the following conditions are met:

1. the work was installed on the web server before the deadline,
2. the web site (all documents and supporting folders) are compressed to a zip file and uploaded to the appropriate *myCourses* drop box before the deadline, and
3. The comment area of the dropbox has a link to the assignment that the TAs and professor use to view and grade work. That grading may involve the use of multiple browsers including, but not limited to, *Firefox, Chrome, Safari, Opera, or Edge*.

**Important:** Always test work in multiple browsers to make sure that the presentation of pages is consistent. Also, be sure that both the HTML and CSS code validate to W3C standards.

Keep in mind that college-level work is expected on all projects. This means use of the skills learned to *design* sites in an appropriate and professional manner are employed *before* implementation. Poorly designed sites/pages may be penalized. When in doubt, re-read the rubric.

*Note:* Many students may have little to no experience in web design. That's one reason for taking this course! However, it is expected that each student will try to create sites that are professional and esthetically pleasing. If unsure whether the design is satisfactory, ask!

Once completed, the project is uploaded to a designated server and a zip file of the project is placed in a designated dropbox on or before the "due date." **DO NOT** modify the uploaded files in any way without first obtaining approval. Uploaded files that are modified *after* the assignment is submitted *without* prior approval are subject to penalties of 10% for each day late.

### Late Policy for Projects

- The maximum grade for late projects 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%.
- ***Projects more than four calendar days late will receive a grade of 0%.***

## Homework / Exercises

Homework / exercise will largely be facilitated this semester through Zybooks Zylabs feature. However there will be some homeworks / exercise facilitated directly in mycourses in which I provide a rubric (outside of Zybooks). This is why it will be very

important to attend class. I will carefully document where you should find things but it is your responsibility to prepare yourself each week, and or ask me if you are confused before they are due (preferably several days before it is due).

### **Late Policy for Exercises**

In order to receive full credit for exercises, the work must be submitted on time to either Zybooks (if a ZyLab) or to Mycourses if an assignment outside of the Zybook Lab.

- 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%.
- ***Exercises / Homeworks more than four calendar days late will receive a grade of 0%. The drop box closes after four 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!***

### **Saving/Back-up Copies**

Although discussed earlier, it bears repeating here. It is strongly recommended that students maintain *multiple* electronic copies of coursework. Minimally, always maintain two copies of the work (perhaps a USB flash drive and an on-line file). Bring a storage device to every class. Use of multiple storage devices is *strongly* recommended. Perform a full backup to multiple locations/devices on a *daily* basis. Be sure to write identification information clearly on any storage device. It would be better to have three copies. If all work is maintained on a single flash drive and is lost, the consequences can be dire. Personal items left in the classroom will be turned in to the "Lost and Found" in the Dean's front office, first floor atrium

NOTE: Loss of work resulting from inadequate multiple backups is NOT an acceptable excuse for turning work in late; extensions or special accommodations may be given but at the 10% per day late penalty.

### **Incomplete ("I") Grades:**

An incomplete, or "I" grade, may be requested in cases where *exceptional conditions beyond ones' control*, such as accidents, severe illness, family problems, etc., have impacted an ability to complete the coursework. Notify the professor of these circumstances *as soon as possible*. Supply appropriate supporting documentation. If an incomplete is granted, the work must be completed within the time limits set by the instructor. The maximum time is two (2) academic semesters. Unfinished "I" grades automatically become "F".

Note: Incomplete grades are never given to students who have simply fallen behind in their work or students who, in the instructor's opinion, are not capable of passing the course.

## Tutors:

The School of Information employs tutors in support of a variety of courses. They work in the IST Open Lab (GOL-2670) and their schedules are displayed on a monitor at the back of the lab.

**Finally:** Any or all of the previous information, except the academic dishonesty policy and Acceptable Computer Use policy, are subject to change or modification during the semester.