# Course Outline – Web Programming – Spring 2024

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*Required Reading:*

[*www.w3schools.com*](http://www.w3schools.com)*,* [*https://bulma.io/*](https://bulma.io/)*,* [*https://v3.vuejs.org/guide/*](https://v3.vuejs.org/guide/)*,* <https://nodejs.org>

## Student Leaning Outcomes:

* Create Dynamic Web Pages
* Create, manage and access a Database for the web site
* Maintain user state
* Design and implement a proper application architecture
* Consume and Generate assets that are not specifically web pages

**Assignments:**

There will be two types of assignments.

1. Suggestions of how to practice the techniques learned in class or required reading.  
   I will not be grading these projects, but I **expect** everyone to complete them to perfection. If you don’t complete the assignments you won’t properly understand the topics at hand and you will **fail** this class because you will not be able to learn the next step without knowing the current step.
2. Milestones in the creation of your final project.  
   The final project will be a fitness tracker app. A web based app like that has **many** parts and requires many techniques.   
   You must start creating your project at the beginning of the semester and you must make significant progress every single week. Sometimes you will create an early version of a feature that may change or be replaced, but that’s the way it goes.  
   At every stage you need to make check-ins to your public source code repository.  
   At certain intervals you will submit links to your working version and to the corresponding version in your source control.

# Finals

This class does not have tests in the classical sense. Instead, we have projects which are graded.

The final project has two parts. The first part is worked on throughout the entire semester. It is graded at milestones throughout the year and as a complete product as the final project at the end of the semester.

The project is a fitness tracker app. It will be judged based on features, completeness, coding & pattern correctness, usability, and design. The design does not need to be anything fancy, but it does need to feel like a fully functional app. The app must include at the very least three complete sub-systems – 1) profile management, 2) exercise log, 3) Sharing with friends. Building such an app will take time. So, you must start at the beginning of the semester and make significant progress every week throughout the semester. You can collaborate with your friends and ask your classmates for help. However, each student must submit their own app. Programming is an art as much as it is a science. As such every programmer has their own style. If I see that any one feature is identical (in presentation and implementation) in two students projects, neither student will be given credit for that feature.

The second part is going to be a particular feature that you will need to add to your project in class within the allotted time. I will not tell you what that feature is until you arrive in class on the day of the final, and you will need to complete that feature by the time you leave. You will not be able to ask your friends or anyone else for help with this particular feature. This feature will be worth 5% of your total grade.

**PARTICIPATION AND ATTENDANCE**

What we learn in class is NOT available in any book. The required readings are all in order to prepare you for class. None of them can replace class. Therefore, missing class will mean that you’ve missed out on important information that WILL reflect on how you create your projects. Therefore, I do not factor attendance directly into your grade. Instead, I am certain that if you miss any classes without making up the material with either myself or a student in the class, or if you try to make up too many classes. That you will get a poor mark on your projects and have no idea why.

**POLICIES REGARDING STUDENTS WITH DISABILITIES**

Students with documented physical, learning, psychological and other disabilities are entitled to receive reasonable accommodations. If you need classroom or testing accommodations, please contact the Disability Resource Center (Student Union Building, Room 205, 257-3020). The DRC will provide forms verifying the need for accommodation. As soon as the instructor receives the form, you will be provided with the appropriate accommodations. Students are encouraged to request accommodations as close to the beginning of the semester as possible. See ADA policy at <http://www.newpaltz.edu/drc/manual_procedures.html>.

**ACADEMIC INTEGRITY**

Students are expected to maintain the highest standards of honesty in their college work. Cheating, forgery, and plagiarism are serious offenses, and students found guilty of any form of academic dishonesty are subject to disciplinary action. For definitions of theses offenses, as well as the process that a faculty member may follow if a student is found to be engaging in any form of academic dishonesty, see the section on Academic Integrity in the Advising Handbook, available at <http://www.newpaltz.edu/advising/policies_integrity.html>.

# RELEVANT ADMINISTRATIVE DATES

Jan 22 Official First Day of Classes  
Mar 11 Mid-Point of semester  
Mar 31 Last day for course withdrawal  
April 8 Registration for Summer & Fall 2024  
May 7 Last day for student elected Satisfactory/Unsatisfactory option  
Apr 24 – May 7 End-of-semester Student Evaluation of Instruction (SEI).

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| Office Hours:  Monday and Thursday 3:15pm – 4:15pm (walk-ins)  Tuesday 12:30 – 1:30 (by appointment)  **Science Hall #244**  If you need help outside office hours, or my hours conflict with your schedule. Feel free to leave me a message or approach me on campus.  My number for emergencies, before midterms and finals or to set up appointments outside office hours is 255-8191 for all other calls x3992 | Grades:  5% Intro  15% Class Participation  20% Midterm  25% “Checkpoints”  30% Final Project – due Thu. May 2nd  5% In Class Final - **Thu. May 16th 12:30-2:30** |

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| Date | Topic | Reading | Suggested Progress |
| Monday  January 22nd | Welcome, Introduction, HTML, IDE’s |  |  |
| Thursday  January 25th | Bulma CSS |  | Goals Essay |
| Monday  January 29th | GIT |  | CSS Menu |
| Thursday February 1st | Deployment |  | Links To Github |
| Monday February 5th | JavaScript, Jquery |  | Links to Render |
| Thursday February 8th | Simple Vue |  |  |
| Monday  February 12th | Node, npm |  | To Do List |
| Thursday February 15th | Vue Cli / Vite |  |  |
| Monday  February 19th | Presidents Day  No Class |  |  |
| Thursday  February 22nd | Modules, Bundling |  | Proper folder structure |
| Monday  February 26th | Vue Binding |  |  |
| Thursday  February 29th | Vue Routing, Composition |  |  |
| Monday  March 4th | Vue Architecture |  |  |
| Thursday  March 7th | Debugging |  |  |
| Monday  March 11th | Express |  | **Midterm Due** Before Class |
| Thursday  March 14st | Client server communication / REST |  |  |
| Monday  March 18th | Server-Side Architecture |  |  |
| Thursday  March 21st | POST / Maintaining state on server |  | 2 controllers, 3 routes |
| Monday  March 25th | Spring Break No Class |  |  |
| Thursday  March 28th | Spring Break No Class |  |  |
| Monday  April 1st | Database Connection |  |  |
| Thursday  April 4th | Database querying |  | Working Client/Server communication |
| Monday  April 8th | oAuth |  | Database |
| Thursday  April 11th | Google Maps |  |  |
| Monday  April 15th | Google personal data Apis |  |  |
| Thursday  April 18th | Facebook |  | Single Sign-on |
| Monday  April 22nd | Passover No Class |  |  |
| Thursday  April 25th | Twillio |  |  |
| Thursday  April 29th | Passover No Class |  |  |
| Thursday  May 2nd | React / Next / JSX |  | **Final Project Due** Before Class |
| Monday  May 6th | React / Next / JSX |  |  |
| Thursday  May 16th | In Class Final **12:30pm – 2:30pm** |  |  |