

# Course Addendum

Semester**: Summer 2023** Subject Code:**APS145** Section**: ZAA**

Subject Title: **Applied Problem Solving**

Professor: **Nargis Khan** Office**: M400**

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Office Hours**: Thursday 1:30 to 2:30**

Approved by:

Kathy Dumanski, Chair, School of Software Design and Data Science

Please read this addendum to the general course outline carefully. It is your guide to the course requirements and activities.

Please refer to the course outline for learning outcomes, course description and text and materials.

Please also visit [Welcome | School of Software Design and Data Science (senecacollege.ca)](https://sdds.senecacollege.ca/) for key information on courses, graduation requirements, transfer credit, and more from the School of Software Design and Data Science.

**Assessment Summary**

|  |  |
| --- | --- |
| Workshops (best 8 of 10) | 35% |
| Presentation (1) | 10% |
| Quizzes (3) | 45% (**Q1**:10%, **Q2**:15%, **Q3**:20%) |
| Assignment (1) | 10% |

## Course Policies

To obtain a credit in this subject, a student must:

* Successfully complete 8 workshops (Best 8 if more than 8 are completed)
* Successfully complete 1 presentation (Best mark used if more than one completed)
* Achieve anaverage of 50% or better onall quizzescombined
* Successfully complete all assignments
* Achieve a grade of 50% or better on the overall course

|  |  |
| --- | --- |
| A+ | 90% to 100% |
| A | 80% to 89% |
| B+ | 75% to 79% |
| B | 70% to 74% |
| C+ | 65% to 69% |
| C | 60% to 64% |
| D+ | 55% to 59% |
| D | 50% to 54% |
| F | 0% to 49% (Not a Pass) |

For further information, see a copy of the Academic Policy, available online (<http://www.senecacollege.ca/about/policies/academics-and-student-services.html>) or at Seneca's Registrar's Offices.

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**TENTATIVE WEEKLY SCHEDULE (Summer 2023)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week** | **Topic or Skill** | **Prescribed Work** | **Assessment** | **Weight** |
| **Week 1**  (May.8 – May.12) | **Introduction**   * Overview of course and evaluations * Computational thinking and problem solving * Developing and illustrating process * Solution refinement and related strategies * Introduce VRETTA math assignment | Vretta Assignment  (**Due: End of Week 8**)  WS #1*(****Individual*** *Logic Part)* |  |  |
| **Week 2**  (May.15 – May.19) | Workshop #1 (***Group solution***)  Iteration, decision making, counting | WS #2*(****Individual*** *Logic Part)* | WS #1 (Shootout) | 4.375% |
| **Week 3**  (May.22 – May.26) | Workshop #2 (***Group solution***)  Nested decisions | WS #3*(****Individual*** *Logic Part)* | WS #2 (Weather)  WS #1 Presentation Due | 4.375%  \* |
| **Week 4**  (May.29 – Jun.2) | Workshop #3 (***Group solution***)  State machines | WS #4*(****Individual*** *Logic Part)* | WS #3 (Traffic)  WS #2 Presentation Due | 4.375%  \* |
| **Week 5**  (Jun.5 – Jun.9) | Workshop #4 (***Group solution***)  Iteration, random numbers, counting, decision making | - | **Quiz #1**  WS #4 (Rock…)  WS #3 Presentation Due | **10%**  4.375%  \* |
| **Week 6**  (Jun.12 – Jun.16) | Introduction to data structures and modularity  *Introduce and assign Workshop #5* | WS #5 *(****Individual*** *Logic Part)* | *IntroduceWS #5 (Theatre)*  WS #4 Presentation Due | -  \* |
| **Week 7**  (Jun.19 – Jun.23) | Workshop #5 (***Group solution***)  Modularity | WS #6 *(****Individual*** *Logic Part)* | WS #5 (Theatre) | 4.375% |
| **STUDY WEEK** | | | | |
| **Week 8**  (Jul.3 – Jul.7) | Workshop #6 (***Group solution***)  Hardware/software interaction, states, data structures, input | WS #7 *(****Individual*** *Logic Part)* | WS #6 (Vending)  WS #5 Presentation Due  **Vretta Assignment (Due)** | 4.375%  \*  **10%** |
| **Week 9**  (Jul.10 – Jul.14) | Workshop #7 (***Group solution***)  Black boxes, functions | WS #8 *(****Individual*** *Logic Part)* | **Quiz #2**  WS #7 (Car Wash)  WS #8 Presentation Due | **15%**  4.375% |
| **Week 10**  (Jul.17 – Jul.21) | Workshop #8 (***Group solution***)  Commercial transactions, input, data storage | WS #9 *(****Individual*** *Logic Part)* | WS #8 (Grocery)  WS #7 Presentation Due | 4.375%  \* |
| **Week 11**  (Jul.24 – Jul.28) | Workshop #9 (***Group solution***)  Timing, black boxes, decisions, stacks | WS #10*(****Individual*** *Logic Part)* | WS #9 (Dungeon)  WS #8 Presentation Due | 4.375%  \* |
| **Week 12**  (Jul.31 – Aug.4) | Workshop #10 (***Group solution***)  Calculations, decisions, ceiling function | Review Course Material | WS #10 (Paint)  WS #9 Presentation Due | 4.375%  \* |
| **Week 13**  (Aug.7 – Aug.11) | Summative Review | Review Course Material | WS #10 Presentation Due | \* |
| **Week 14**  (Aug.14 – Aug.18) | - | - | **Quiz #3** | **20%** |

**\**Presentations*** *are done by one person in each sub-group and worth* ***10%*** *of the presenter’s final grade. Every student must do at least one presentation.*

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