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| The UWindsor Logo | University of Windsor**School of Computer Science** | **COMP-2560**  **Computer Architecture I: Digital Design**  **Winter 2022**  **Laboratory Syllabus** |

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| **Lab Instructors:**  **(GAs)** | **Zahra Taherikhonakdar**  **E-mail:** taherik@uwindsor.ca  **Office Location:** *Online, Blackboard*  **Lab Sections: #51: Tuesday 11:30AM-12:50PM, Erie Hall 1115 (Hyflex)**  **#52: Thursday 11:30AM-12:50PM, Erie Hall 1115 (Hyflex)**    **Roonak Moasses**  **E-mail:** moasses@uwindsor.ca  **Office Location:** *Online, Blackboard*  **Lab Sections: #53: Tuesday 01:00AM-02:20PM, Erie Hall 1115 (Hyflex)**  **#54: Thursday 01:00PM-02:20PM, Erie Hall 1115 (Hyflex)** |  |
| **\*Note:** Only email originating from a valid University of Windsor student account will be accepted from students wishing to contact the lab instructors or use the Blackboard email tool within the course site. Please include your full name, student ID and related lab section in your correspondence. Do not spam with multiple or lengthy emails. Should you not receive timely feedback to your inquiries reach out during lab hours directly, or in the event of no response contact the course instructor at [hfani@uwindsor.ca](mailto:hfani@uwindsor.ca) for support.  Students are required to communicate with the lab instructor foremost, based on the lab section they register, regarding any lab-related questions and issues such as:   * reopening for another submission attempt, * reviewing markings of a submission, * accepting a late submission for a verifiable reason, etc.   If the issue is not resolved, students then reach out to the course instructor at [hfani@uwindsor.ca](mailto:hfani@uwindsor.ca). | |
| **Teaching Assistants:**  **(TAs)** | |  |  | | --- | --- | | **A person in a suit  Description automatically generated with low confidenceYousef Mahmoud (Marker)**  **E-mail:** mahmoudy@uwindsor.ca | **Bhavya Patel (Marker)**  **E-mail:** patel2z3@uwindsor.ca | | **Cody McCoy (Marker)**  **E-mail:** mccoy6@uwindsor.ca | **Yash Goswami (Marker)**  **E-mail:** goswamiy@uwindsor.ca | | **Manush Thaker (Media)**  **E-mail:** thaker3@uwindsor.ca | **Kelvin Liu (Hyflex)**  **E-mail:** liu6f@uwindsor.ca | | |
| **Pre-Requisites:** | C Programming Language | |
| **Lab Description\*:** | This laboratory guide is intended for the student who takes COMP2650: Computer Architecture I: Digital Design course at the School of Computer Science. **It includes 10 laboratory tutorials**. Each laboratory covers design and analysis practices tightly connected to the course lectures, so the attendance at the lectures is highly encouraged for a better understanding of the treated subjects. The student is encouraged to go through the guide in the presented order, since each laboratory may contain elements studied, designed, and analyzed in the previous ones. Each chapter of this laboratory guide may start with a short presentation of the necessary theoretical concepts, followed by design and analysis practices to improve the students' problem-solving ability. The weekly laboratory assignments that a student must do are found at the end of each chapter. The student is encouraged to carefully read all the laboratory material before attending the laboratory session to be familiar with the tasks that must be designed and analyzed throughout the laboratory.  **\**Note:*** *Students are strongly encouraged in participating in the lab development and update process. Please feel free to make recommendations for changes of the manuals to the lab instructors and/or course instructor at* [*hfani@uwindsor.ca*](mailto:hfani@uwindsor.ca)*.* | |
| **Labs:** | |  |  | | --- | --- | | First Week: No Lab |  | | Lab02 | Programming Environment Setup | | Lab03 | n-bit Logic Operation | | Lab04 | Conversion between Number Systems | | Lab05 | Arithmetic in Signed Magnitude | | Reading Week: No Lab |  | | Lab07 | Arithmetic in 2’s Complement | | Lab08 | Truth Table | | Lab09 | Canonical Sum of Products | | Lab10 | Canonical Product of Sums | | Lab11 | Gray Code | | Lab12 | Shift Operators | | Last Week: No Lab |  | | |
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| **Labroom:** | Erie Hall 1115 + Blackboard (Hyflex) | |
| **Attendance:** | Strongly Encouraged but not Mandatory. | |
| **Lab Release:** | Monday 04:00AM Eastern Time | |
| **Submission Due:** | Next Week Wednesday Morning 04:00AM Eastern Time | |
| **Grade Release:** | Next Week Monday 04:00AM Eastern Time | |
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| **Grading:** | 10 × 2% each = 20%  A numeric grade on a scale of 0 to 100 will be assigned (rounded integer) to each lab.  **Late submission: 0**  **\**Grade appeal:*** Informal reviews and appeals of the marks for labs will be considered only if requested within 10 days after the release of the corresponding grades. After the 10-day period students will have to submit a formal appeal if they wish within 6 weeks. See Senate Bylaws 54 (Undergraduate Students) and Senate Bylaws 55 (Graduate Students) for more details on appealing about grades. | |
| **Resources:** | The course website is on [***https://blackboard.uwindsor.ca/***](https://blackboard.uwindsor.ca/)  → Labs  → Labroom  → Sections & Instructors  Please check it frequently for announcements and other useful info. | |