Time: Monday, Tuesday, Wednesday and Friday 9:55 AM – 10:50 AM

Classroom: Centennial 3214 / Wing Technology 16

Professor: Dr. David Mathias

email: dmathias@uwlax.edu

website: https://cs.uwlax.edu/~dmathias

Office: Wing Technology 212

Office Hours: Monday 11:00 – 12:00, Tuesday 3:15 – 4:15, Wednesday 11:00 – 12:00 and Friday 11:00 – 12:00, or by appointment.

Text Book: Online text from ZyBooks. To access the book:

1. Sign in or create an account at learn.zybooks.com
2. Enter zyBook code: UWLAXCS120MathiasSpring2020
3. Choose Section 02
4. Subscribe

Your subscription will run from the date you subscribe until several weeks after the end of the semester.

Learning Management System: We will use Canvas in this course. IMPORTANT NOTE: I use canvas to record grades for individual assignments. I do NOT use Canvas to calculate your grade for the course. While the total grade displayed on Canvas may approximate your grade, it is not guaranteed to be accurate. The only reliable source for your final course grade is Wings.

Catalog Description: Four hours. Prerequisites: MTH 151 or MTH 175, or placement test scores at, or above, MTH 151. An introduction to the fundamentals of software development; including software classes, objects, inheritance, polymorphism, logic, selection control, repetition control, subprograms, parameter passage, and rudimentary software engineering techniques. Students complete numerous programming projects using a modern programming language.
**Student Learning Outcomes:** By the end of the course, students should be able to:

- Write Java programs using primitive data types and their operations.
- Use complex control structures such as conditional execution and iteration.
- Define variables and use them effectively.
- Use existing classes and create new ones with attention to information hiding, inheritance and overloading.
- Use basic linear data structures for the storage and manipulation of potentially large amounts of complex information.
- Create programs that are interactive with attention to design and usability.

**Programming Assignments:** One of the largest components of your grade in this course is outside-of-class programming assignments. The only way to learn how to program is by programming. You will not be successful in this class unless you write your own code. I encourage you to study with others and to discuss concepts and ideas with classmates. However, you must write and submit your own work.

Rules for program submission:

- Programs are due at 11:59 PM on the due date. There is a long and proud tradition of programs being due at that time. You are, of course, welcome to submit well before the deadline.
- Late submissions are accepted up to 48 hours after they are due. Up to 24 hours late, there is a 20% penalty. Up to 48 hours late, there is a 50% penalty. Programs will not be accepted more than 48 hours late.
- You **must** include the following at the top of your program file: a block comment with the following information (in this order and each on a separate line): your name, CS 120 followed by your section number, the assignment number, and the due date. Next is a blank line followed by a brief description of the assignment.
- Comment your code (we’ll discuss in class what this means). You will be tempted to skip this. Resist that temptation. Good commenting is critical.
- Adhere to the coding conventions we discuss in class. I don’t care that your uncle’s wife’s cousin told you to do things differently. There are many ways to format code, and I don’t claim that my way is the one and only right way, but it will be much easier for us to talk about code if we all use a common format.
Evaluation and Assessment:

- 25% – Programming assignments
- 10% – In-class programming
- 10% – Online exercises
- 30% – Midterms (2)
- 25% – Final exam

There will be no makeup exams except with advance notice (at least one week) of an approved UWL activity or with a doctor’s note confirming serious illness. In all cases, it is the student’s responsibility to provide written documentation. Late assignments will not be accepted except as outlined in this syllabus. There will be no extra-credit work.

Grading Scale: Letter grades will be assigned according to the table below. Let \( x \) be your numeric score for the course:

- A: \( x \geq 93 \)
- AB: \( 89 \leq x < 93 \)
- B: \( 83 \leq x < 89 \)
- BC: \( 79 \leq x < 83 \)
- C: \( 70 \leq x < 79 \)
- D: \( 60 \leq x < 70 \)
- F: \( x < 60 \)

Attendance: I do not take attendance. However, attending class is almost always a very good idea. Knowledge is not poured into your head as water into a glass. Learning requires engaging with the course. This includes asking questions, answering questions, completing in-class exercises, etc.

In-class programming: During most weeks, we will meet in the CS department lab, 16 Wing Technology Center, on Mondays and Wednesdays. During these sessions, you will be given a manageable programming assignment to complete. You are strongly encouraged to work in pairs. While completion of the assignment is the goal, credit will be given based on making a good faith effort to solve the problem.

Academic Integrity: Academic misconduct is a violation of the UWL Student Honor Code (http://catalog.uwlax.edu/undergraduate/academicpolicies/studentconduct) and is unacceptable. I expect you to submit your own original work and participate in
the course with integrity and high standards of academic honesty. When appropriate, cite original sources, following the style rules of our discipline.

PLEASE NOTE that whenever a grade penalty is imposed due to academic misconduct, the instructor is required to write a letter documenting the misconduct. Copies are sent to the student, to the Office of Student Life (where the letter remains on file in the student’s record), and to the Dean of the student’s College. Refer to https://www.uwlax.edu/student-life/student-resources/student-handbook for a detailed definition of academic misconduct, and for possible sanctions and consequences. The Office of Student Life can also assist.

Plagiarism or cheating in any form may result in failure of the assignment or the entire course, and may include harsher sanctions. Refer to the Student Handbook #14.02 for a detailed definition of academic misconduct.

For helpful information on how to avoid plagiarism, go to “Avoiding Plagiarism” on the Murphy Library website (http://libguides.uwlax.edu/plagiarism2). You may also visit the Office of Student Life (https://www.uwlax.edu/student-life/) if you have questions about plagiarism or cheating incidents. Failure to understand what constitutes plagiarism or cheating is not a valid excuse for engaging in academic misconduct.

PRO-UWL: This class is participating in the Navigate Progress Report Online early alert system designed to promote student success. If I notice that you are experiencing difficulties early in the semester (e.g., low assignment scores or limited participation), I may note this information and you will receive notification indicating that I have entered feedback. I encourage you to meet with me and/or utilize helpful campus resources listed on UWL’s Student Success page https://www.uwlax.edu/info/student-success/.

Inclusive Excellence: UWL’s core values include “Diversity, equity, and the inclusion and engagement of all people in a safe campus climate that embraces and respects the innumerable different perspectives found within an increasingly integrated and culturally diverse global community” (https://www.uwlax.edu/chancellor/mission). If you are not experiencing my class in this manner, please come talk to me about your experiences so I can try to adjust the course if possible.

Student Course- and Faculty-Related Concerns, Complaints, and Grievances:

Informal Complaints:
If a student has a concern or a complaint about a faculty member or course, the general process for making informal complaints is outlined in steps 1-3 below. Students are welcome to bring a friend or a UWL staff member with them during the following steps. Students who report concerns/complaints/grievances, whether informally or formally,
will be protected from retaliation and have the right to expect an investigation and the option to have regular updates on the investigation:

1. The student should speak directly to the instructor.

2. If the student is uncomfortable speaking with the instructor, or they are unsatisfied with the solution, they should go to the chair of the faculty member’s home department.

3. If the student is uncomfortable speaking with the department chair, or the chair is the faculty member in question, or they are unsatisfied with the solution, the student should speak with their college dean.

Depending on the specifics of the student’s concern, it may be helpful for them to reach out to additional offices:

- Complaints/concerns/grievances about grades, teaching performance, course requirements, course content, incivility, or professional ethics should follow the process outlined above. Students may also wish to seek support from the Student Life office.

- Complaints/concerns/grievances related to hate/bias and discrimination may follow the process outlined above, and in addition or instead students may contact the Campus Climate office and/or submit a hate/bias incident report.

- Complaints/concerns/grievances related to sexual misconduct may begin with the process outlined above, but will need to also involve the Equity & Affirmative Action and Violence Prevention offices, and/or the Title IX Team. Students should know that faculty members are mandatory reporters of sexual misconduct, but that confidential resources are available to them.

Formal Complaints:
If the student is unsatisfied with the solution of their informal complaint, they have the right to file a formal institutional complaint with the Student Life office, as described in the Student Handbook.

**Student Evaluation of Instruction:** UWL conducts student evaluations electronically. Approximately 2 weeks prior to the conclusion of a course, you will receive an email at your UWL email address directing you to complete an evaluation for each of your courses. In-class time will be provided for students to complete the evaluation in class. Electronic reminders will be sent if you do not complete the evaluation. The evaluation will include numerical ratings and, depending on the department, may provide options for comments. The university takes student feedback very seriously and the information
gathered from student evaluations is more valuable when a larger percentage of students complete the evaluation. Please be especially mindful to complete the surveys.

**Useful Resources:** The following links are provided for your convenience. This is not an exhaustive list of services available on campus.

ACCESS Center: [http://www.uwlax.edu/access-center](http://www.uwlax.edu/access-center)

Student Support Services: [http://www.uwlax.edu/student-support-services](http://www.uwlax.edu/student-support-services)

For statements regarding Sexual Misconduct, Religious Accommodations, Students with Disabilities, and Veterans and Active Military Personnel, please see: [https://www.uwlax.edu/info/syllabus](https://www.uwlax.edu/info/syllabus)
Approximate schedule:

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<thead>
<tr>
<th>Week</th>
<th>Topics:</th>
<th>Text:</th>
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| 1    | January 27: Course intro; Hardware, software & programs  
January 28: Our first programs  
January 29: Lab day (16 Wing Technology)  
January 31: Let’s write some code  
February 3: Lab day (16 Wing Technology)  
February 4: Java Primitives  
February 5: Lab day (16 Wing Technology)  
February 7: Primitives and assignment  |
| 2    | February 10: Lab day (16 Wing Technology)  
February 11: Selection statements and boolean conditions  
February 12: Lab day (16 Wing Technology)  
February 14: Randomness, selection & control  |
| 3    | February 17: Selection, logic & control I  
February 18: Selection, logic & control II  
February 19: Lab day (16 Wing Technology)  
February 21: Repetition with loops  |
| 4    | February 24: Lab day (16 Wing Technology)  
February 25: More loops  
February 26: Lab day (16 Wing Technology)  
February 28: Discussion/Questions/Review  |
| 5    | March 2: Midterm 1  
March 3: Characters, strings, and Text  
March 4: Lab day (16 Wing Technology)  
March 6: TBD  |
| 6    | March 9: Lab day (16 Wing Technology)  
March 10: Arrays  
March 11: Lab day (16 Wing Technology)  
March 13: Loops & arrays  |
| 7    | March 16–March 22: Spring Break!  |


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<th>Week</th>
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<tr>
<td>8</td>
<td>March 23 Lab day (16 Wing Technology)</td>
<td>Ch. 6</td>
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<td>March 24 Using methods</td>
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<td>March 25 Lab day (16 Wing Technology)</td>
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<td>March 27 Writing methods</td>
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<td>March 30 Lab day (16 Wing Technology)</td>
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<td>March 31 Nested loops &amp; variables</td>
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<td>April 1 Lab day (16 Wing Technology)</td>
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<td>April 3 Multi-dimensional arrays</td>
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<td>April 7 Static methods &amp; variables</td>
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<td>April 10 Discussion/Questions/Review</td>
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<td>April 13 Midterm 2</td>
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<td>April 14 Writing non-void methods</td>
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<td>April 15 Lab day (16 Wing Technology)</td>
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<td>April 17 Supplier classes</td>
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<td>April 20 Lab day (16 Wing Technology)</td>
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<td>April 21 Interfaces and events</td>
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<td>April 24 More interfaces and events</td>
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<td>May 5 Using inheritance</td>
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