UNIVERSITY OF WISCONSIN-MILWAUKEE School of Information Studies

INFOST 350: Introduction to Application Development
Fall 2018 SYLLABUS

Instructor: Anthony Jesmok
Office Location: Off-Campus
E-mail: ajjesmok@uwm.edu
Office Hours: By appointment at area coffee shops or online chat.
Meeting Times & Location: NWQ 1990, 5:30 to 8:10 PM Tuesdays
Credits: 3

CATALOG DESCRIPTION

Introduction to the fundamental concepts of application development. Basic application development concepts will be explained, analyzed, and practiced.

EXPANDED COURSE DESCRIPTION

This course acquaints students with the core concepts of software development (programming) from an Information Studies perspective. Students will learn how to develop basic software applications using the Python programming language that can be applied to further coursework and careers in application development and information technology.

PREREQUISITES

INFOST 110 (C or Better) or instructor consent. Students should have an understanding of basic computer operations, such as typing, accessing the internet, and technology troubleshooting skills.

LEARNING OBJECTIVES

Upon completion of the course, students will be able to:

1. Explain fundamental programming concepts.
2. Create working application logic to conduct basic tasks using a programming language.
3. Verbally discuss and explain code and application logic to other students.

METHODS

Lecture, hands-on assignments, quizzes, in-class activities.

EXPECTED TIME REQUIREMENT

This course requires a weekly time commitment. General university guidelines indicate that a 3-credit course requires a minimum 144 hour time commitment over the semester. This time commitment represents a minimum of 9-10 hours of work per week per course. Three of these hours are lectures. Students are expected to do an additional 6-7 hours per week of study and work on assignments to achieve the learning goals of this course.
REQUIRED MATERIALS AND TECHNOLOGY REQUIREMENTS

This course does not require textbooks, although students may wish to purchase or check out books to enhance their understanding of the material. It is strongly recommended that students have their own computer, preferably a laptop, that can be used for assignments. Computer labs are available but have limitations. A personal computer is essential for anyone aiming to take more programming courses or continue down this career path.

For technical assistance unrelated to Canvas, contact the SOIS Tech Support Office: (414) 229-4707, soistech@uwm.edu, http://uwm.edu/informationstudies/resources/it/.

For technical assistance related to Canvas, you can contact Canvas directly 24/7: https://uwm.edu/canvas/students/.

ACADEMIC HONESTY

The work you submit must be solely your own. While you may collaborate with classmates on assignments, you cannot directly view each other’s’ code, only discuss concepts. The instructor runs automated and random manual checks on assignments for signs of academic dishonesty. There is no collaboration allowed on quizzes or the final project. Academic misconduct may result in a lowered grade, no credit for a given assignment, or removal from the course. Serious incidents may be handled at the University level with consequences including suspension, probation, or expulsion.

ATTENDANCE

For one to succeed and pass this course, consistent practice and attendance is crucial. With this being said, circumstances may arise that could require a student to miss a class. Students are allowed one unexcused absence per semester. An excused absence needs to cleared with the instructor via email. The instructor reserves the right to refuse a request for an excused absence. Documentation is required for excused absences related to incidents permitted by campus policy. Each absence beyond those excused and the one unexcused will results in points lost in the “Attendance” section of grading.

Attendance is taken during the last 10 minutes via a one-question quiz that will ask you to enter a “word of the week”. The instructor will give this word out at the end of class, with time to enter it into Canvas.

EMAIL POLICY

Please feel free to email pertinent questions regarding any homework or for further clarification of a particular issue, or to request an excused absence. You need not mention explicitly detailed matters, but communication is important. However, do not abuse email. If you have other means of obtaining class processes or instruction that you missed such as Canvas, try that option. It should also be noted that emails should use proper language and respect.
ASSIGNMENTS AND GRADING

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Quizzes</th>
<th>Attendance</th>
<th>Final Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programming or short answer weekly assignments.</td>
<td>Multiple choice quizzes based on the lecture material.</td>
<td>Attending class and checking in via Canvas.</td>
<td>A final program presented during the last two sessions.</td>
</tr>
<tr>
<td>40% of Final Grade</td>
<td>15% of Final Grade</td>
<td>10% of Final Grade</td>
<td>35% of Final Grade</td>
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</tbody>
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GRADING SCALE

<table>
<thead>
<tr>
<th>Grade</th>
<th>96-100</th>
<th>74-76.99</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-95.99</td>
<td>A-</td>
<td>70-73.99</td>
<td>C-</td>
</tr>
<tr>
<td>87-90.99</td>
<td>B+</td>
<td>67-69.99</td>
<td>D+</td>
</tr>
<tr>
<td>84-86.99</td>
<td>B</td>
<td>64-66.99</td>
<td>D</td>
</tr>
<tr>
<td>80-83.99</td>
<td>B-</td>
<td>60-63.99</td>
<td>D-</td>
</tr>
<tr>
<td>77-79.99</td>
<td>C+</td>
<td>Below 60</td>
<td>F</td>
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LATE ASSIGNMENTS AND QUIZZES

Not accepted. Students who fail to submit an assignment or quiz by the due date will be given a grade of 0% with no chance of re-dos unless an extenuating circumstance, with appropriate documentation, exists. Exceptions to this policy are rare.

STUDENT LIFE RESOURCES

**Resource Centers:** UWM provides assistance for students in the form of resource centers on campus. These resource centers are offered through the Division of Student Affairs, and you can explore these resource centers online at [https://uwm.edu/studentaffairs/](https://uwm.edu/studentaffairs/). Resources include the LGBT+ Resource Center, Women’s Resource Center, and various cultural centers.

**Mental Health:** Students with mental health concerns are encouraged to contact Norris Health Center University Counseling Services. Information can be found at [https://uwm.edu/norris/counseling/](https://uwm.edu/norris/counseling/) and sessions are available at no cost to on-campus students. The instructor is willing to listen and provide guidance towards these resources. For emergencies, always call 911 or the UWM Police emergency line at 414-229-9911. The National Suicide Prevention Hotline is 1-800-273-8255 or online chat is available at [http://chat.suicidepreventionlifeline.org](http://chat.suicidepreventionlifeline.org).

**Title IX:** The instructor is a mandated reporter under Title IX of the Civil Rights Act and must report any instance of discrimination or unfair treatment on the basis of sex, such as sexual harassment, assault, domestic violence, and exploitation. If a person is uncomfortable reporting these to the instructor, and thus to the Title IX Coordinator, referrals to confidential resources can be made upon request. You can learn more about Title IX at [https://uwm.edu/titleix/](https://uwm.edu/titleix/).
## COURSE SCHEDULE

<table>
<thead>
<tr>
<th>Week</th>
<th>In-class, we did these activities:</th>
<th>By the start of class next week, complete:</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/4</td>
<td>● Syllabus&lt;br&gt;● Introductions&lt;br&gt;● History of Programming&lt;br&gt;● Computational Thinking&lt;br&gt;● Repl.it Setup</td>
<td>● Academic Honesty Agreement&lt;br&gt;● Quiz 1&lt;br&gt;● Skills Practice 1</td>
</tr>
<tr>
<td>9/11</td>
<td>● Introductory Data Types and Manipulation&lt;br&gt;  ○ Variables&lt;br&gt;  ○ Operators&lt;br&gt;  ○ Mathematics</td>
<td>● Quiz 2&lt;br&gt;● Skills Practice 2</td>
</tr>
<tr>
<td>9/18</td>
<td>● Complex Data Types&lt;br&gt;  ○ Lists&lt;br&gt;  ○ Tuples&lt;br&gt;  ○ Dictionaries&lt;br&gt;  ○ Strings</td>
<td>● Quiz 3&lt;br&gt;● Skills Practice 3&lt;br&gt;● Instructor Evaluation #1</td>
</tr>
<tr>
<td>9/25</td>
<td>● Logical Programming&lt;br&gt;  ○ Decisions&lt;br&gt;  ○ For Loops&lt;br&gt;  ○ While Loops&lt;br&gt;  ○ Break, Continue, and Pass</td>
<td>● Quiz 4&lt;br&gt;● Skills Practice 4&lt;br&gt;●</td>
</tr>
<tr>
<td>10/2</td>
<td>● Advanced For Loops&lt;br&gt;● Putting It All Together: Computational Thinking Applied to What We’ve Learned</td>
<td>● Quiz 5&lt;br&gt;● Skills Practice 5&lt;br&gt;● Read Articles for Discussions Next Week</td>
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<tr>
<td>10/9</td>
<td>● Professional Development Week&lt;br&gt;● Guest Appearance&lt;br&gt;  ○ J. Dietenberger, International Technology and Business Consultant&lt;br&gt;● Resume and Career Tips and Tricks With Anthony</td>
<td>● Read Ethics Articles&lt;br&gt;  ○ Quiz 6&lt;br&gt;  ○ Skills Practice 6&lt;br&gt;● Professional Development Reflection</td>
</tr>
<tr>
<td>10/16</td>
<td>● Software Engineering Ethics Discussions&lt;br&gt;  ○ Defense Contracts and Tech Companies&lt;br&gt;  ○ Data Privacy in the</td>
<td>● Skills Practice 7 (Midterm)&lt;br&gt;● Instructor Evaluation #2</td>
</tr>
<tr>
<td>Date</td>
<td>Activities</td>
<td>Assessments</td>
</tr>
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<td>-----------------------------------------------------------------------------</td>
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</tbody>
</table>
| 10/23   | ● Compartmentalizing Code  
  ○ Functions  
  ○ Scope  
  ● Exception Handling | ● Quiz 7  
  ● Skills Practice 8 |
| 10/30   | ● Importing and Using Packages  
  ● External Data  
  ○ Examples of JSON API Retrieval | ● Quiz 8  
  ● Skills Practice 9 |
| 11/6    | ● Using Python Packages To Do Cool Stuff  
  ● Final Assignment Overview with Q&A  
  ● Work Session for Finals | ● Quiz 9  
  ● Skills Practice 10  
  ● Final Project Check-In #1 |
| 11/13   | ● Introduction to Object-Oriented Programming | ● Quiz 10  
  ● Skills Practice 11  
  ● Instructor Evaluation #3 |
| 11/20   | ● Thanksgiving Break  
  ● Work on Finals Remotely | ● Final Project Check-In #2 |
| 11/27   | ● What's Next?  
  ○ Pathways for Future Study and Careers  
  ○ Final Exam Procedure Overview  
  ● Work Session for Finals | ● Have Presentation and Code Prepared for Next Week (Even If You're Going on the 11th) |
| 12/4    | ● Final Presentations - Day 1 | ● More Finals Next Week  
  ● Instructor Evaluation #4 |
| 12/11   | ● Final Presentations - Day 2 | ● Enjoy Winterim! |
The Secretary of the University publishes a list of documents that explain various university policies, resources, and procedures. They can be found at [https://uwm.edu/secu/syllabus-links/](https://uwm.edu/secu/syllabus-links/).

Undergraduates may also find the Panther Planner and Undergraduate Student Handbook useful: [http://www4.uwm.edu/osl/students/](http://www4.uwm.edu/osl/students/).

For graduate students, there are additional guidelines from the Graduate School: [http://www.uwm.edu/Dept/Grad_Sch/StudentInfo/](http://www.uwm.edu/Dept/Grad_Sch/StudentInfo/) and include those found in the Graduate Student and Faculty Handbook: [http://www.graduateschool.uwm.edu/students/policies/expanded/](http://www.graduateschool.uwm.edu/students/policies/expanded/).

If you are pursuing an MLIS degree, you need to earn at least a B to pass the course. See the policy at: [http://www.uwm.edu/Dept/Sois/academics/MLIS/mlisrequirements.htm](http://www.uwm.edu/Dept/Sois/academics/MLIS/mlisrequirements.htm).

**Students with disabilities:** If you will need accommodations in order to meet any of the requirements of a course, please contact the instructor as soon as possible. Students with disabilities are responsible to communicate directly with the instructor to ensure special accommodation in a timely manner. There is comprehensive coverage of issues related to disabilities at the Student Accessibility Center ([http://www.uwm.edu/Dept/DSAD/SAC/MainOffice.html](http://www.uwm.edu/Dept/DSAD/SAC/MainOffice.html)), important components of which are expressed here: [http://www.uwm.edu/Dept/DSAD/SAC/SACltr.pdf](http://www.uwm.edu/Dept/DSAD/SAC/SACltr.pdf).

**Religious observances:** Students’ sincerely held religious beliefs must be reasonably accommodated with respect to all examinations and other academic requirements, according to the following policy: [http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S1.5.htm](http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S1.5.htm). Please notify your instructor within the first three weeks of the Fall or Spring Term (first week of shorter term or Summer courses) of any specific days or dates on which you request relief from an examination or academic requirement for religious observances.

**Students called to active military duty:** UWM has several policies that accommodate students who must temporarily lay aside their educational pursuits when called to active duty in the military ([http://www3.uwm.edu/des/web/registration/militarycallup.cfm](http://www3.uwm.edu/des/web/registration/militarycallup.cfm)), including provisions for refunds, readmission, grading, and other situations.

**Incompletes:** A notation of “incomplete” may be given in lieu of a final grade to a student who has carried a subject successfully until the end of a semester but who, because of illness or other unusual and substantial cause beyond the student’s control, has been unable to take or complete the final examination or some limited amount of other term work. An incomplete is not given unless the student proves to the instructor that they were prevented from completing course requirements for just cause as indicated above ([http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S31.pdf](http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S31.pdf)).

**Discriminatory conduct (such as sexual harassment):** UWM and SOIS are committed to building and maintaining a campus environment that recognizes the inherent worth and dignity of every person, fosters tolerance, sensitivity, understanding, and mutual respect, and encourages the members of its community to strive to reach their full potential. The UWM policy statement ([http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S47.pdf](http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S47.pdf)) summarizes and defines situations that constitute discriminatory conduct. If you have questions, please contact an appropriate SOIS administrator.

**Academic misconduct:** Cheating on exams and plagiarism are violations of the academic honor code and carry severe sanctions, ranging from a failing grade for a course or assignment to expulsion from the University. See the following document ([http://www.uwm.edu/Dept/OSL/DOS/conduct.html](http://www.uwm.edu/Dept/OSL/DOS/conduct.html)) or contact the SOIS Investigating Officer (currently the Associate Dean) for more information.

**Grade appeal procedures:** A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow SOIS appeals procedures or, in the case of a graduate student, the Graduate School. These procedures are available in writing from the respective department chairperson or the Academic Dean of the College/School ([http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S28.htm](http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S28.htm)).

**Examinations and Finals:** The Secretary of the University is authorized to prepare the final examination schedule. The time of the final examination for an individual or a class may be changed only with the
prior approval of the dean or director of the respective college/school. The change will involve a postponement to a later date. For individuals with exam conflicts, a separate week at the very end of the exam week will be reserved to take one of the conflicting exams (http://www.uwm.edu/Dept/SecU/acad%2B)