General Information
Time and Place: MWF 12:00-12:50, Wright 119
Class Website: http://www.cs.uni.edu/~schafer/3310/
Credit Hours: Three (3). This course meets the Course Credit Hour Expectation outlined in the Course Catalog.
Instructor: Dr. Ben Schafer
Email: schafer@cs.uni.edu
Office: 316 ITTC, phone 273-2187
Student/Office Hours: Due to Covid-19 restrictions, I will not be holding formal, face-to-face office hours. However, I am very willing and WANT to meet with you. To accomplish this we will use online office hours via Zoom.
  • The easiest way is to use my Google Calendar to schedule an appointment during regular student hours which is MWF, 9:00-10:50 AM and 1:00-1:50 PM
  • To set up an appointment use
  • If those times don't work for you, PLEASE, send me an email and propose a specific alternative.

If you feel like we really need to be F2F reach out to me via email to set this up.

Course Information
Course Description
Enhances understanding of programming, addresses elements of program quality, and examines the pedagogy of programming instruction. Topics include program quality, goals of programming instruction; teacher beliefs about programming content and pedagogy; inclusive, supportive, and equitable practices; curricular alternatives; and assessment-based instructional planning.

Course Learning Outcomes
By the end of this semester students taking this course should be able to meet the following objectives:
  • Identify programming fundamentals and discuss prerequisite relationships
  • Analyze programming language considerations for a classroom
  • Explain the program design process
  • Identify aspects of quality programming
  • Recognize the presence/absences of quality elements and suggest improvements
  • Discuss their teaching/learning beliefs related to programming instruction
  • Identify learning considerations
  • Discuss supportive practices in general and in the context of a specific scenario/classroom
  • Apply programming based considerations to instructional design

Required Materials
We will use parts of "Teaching Tech Together: How to make lessons that work and build a teaching community around them" by Greg Wilson (ISBN 978-0-367-35297-4).

Having said that, no single textbook fits our needs. Required readings and other materials will also be selected from legally available resources on the internet or from instructor produced materials.
Course Structure
The course is divided up into several "topics." Each topic will consist of some combination of the following activities

- Readings
  - These will come from either the textbook or from online resources.

- Individual Reflection
  - This activity asks you to think through your own experiences as a novice programmer and as a potential teacher. It may also ask you incorporate elements of the reading that you completed.
  - You will typically create a document where you answer several questions, make a list of ideas, reflect on some code, etc.
  - You will submit this to me as evidence that you meaningfully completed the activity.

- Small Group Reflection
  - Throughout the course you will be assigned a "small group" of students. The members of your group may change from unit to unit.
  - As a group you will discuss your individual reflections for the week and use your collective wisdom to come up with a small-group reflection (often times VERY similar to the individual reflections but occasionally including some new material).
  - Your group should clearly indicate which of the members of the group actively participated in the discussion and the generation of the group report.

- Individual Responses
  - Once the small group reports are submitted, I will post these online for all to see.
  - I will ask you, as an individual, to read the small group reports from the other groups. I will ask you to reflect on what other groups came up with that your group did not as well as what was common across the class as a whole.
  - To wrap this all up you will submit a second reflection discussing these issues and wrapping up your "final" thoughts on the topic.

It is worth noting that while Unit 4 – Designing Instruction will have some of these common elements it will also have your final project as part of the timeframe. Unit 4 may differ slightly from the first 3 units in its overall structure.

Course Grading
NOTE: This description of course grading is based on the assumption that we complete the semester on-campus. If we move to a completely offline scenario, or if we have a significant disruption mid-semester, I may want/need to revise the grading scenario. In that case, I will clearly republish my expectations on the class website.

You will earn six grades/scores in this course. Each of these is a 5-0 score based on the idea that an A is worth 5 points, a B is worth 4 points, a C is worth 3 points, a D is worth 2 points, and an F is worth 1 or 0. Think of this as the standard 4 point GPA system with one point added to everything to allow for there to be two levels of F at the end of the semester.

These six grades will consist of:

- 3 Competency Demos (Units 1-3)
  - These are sort of like "mid-term" exams and largely follow the concept of Competency Demos used in our prior course.
  - As in our previous course, you will have an opportunity to retake a competency demo if you are unsatisfied with your grade.
• 1 Final Project
  o This will be a course design project.
  o This will largely serve as the competency demo for Unit 4 but will almost certainly include elements of
    units 1-3.
  o It will be officially due on Monday, May 3rd during the final exam period. Because this is a final project
    there will no opportunity to revise your project after that date. However, there may be opportunities to
    submit a version earlier than this date for feedback to guide your final deliverable. This will be discussed
    during Unit 4
• 1 Final Competency Demo
  o This will be a wrap up of the course and offered during the university's scheduled final exam period on
    Monday, May 3rd. Because it is the final there is no opportunity to revise/resubmit this material.
• In-Unit Deliverables and Small Group Participation
  o I firmly believe that in order to really learn in this course you need to participate in consistent and ongoing
    interaction with the material and with your peers. I think you rob yourself, and your peers, if you are not
    willing to participate in classroom discussions on a daily basis. As such, I will assign some points for this
    interaction and the daily work.
  o I predict that this course will have somewhere in the range of 15-20 individual deliverables and 7-10 small
    group deliverables. Having said that, this course will evolve and it is hard for me to know for sure what I
    will collect/mark or not.
    ▪ In MOST cases I will not be assigning differentiated grades on these beyond 1 point each for
      turned in "on-time" and shows meaningful effort for completion.
    ▪ If I feel that people are abusing this system (that is, people are submitting documents on time but
      showing the bare minimum of effort) I may modify this policy to have more levels of grading [or
      simply become very picky about what is needed to get the 1 point of credit]
  o The five point grade for this section of the course will be assigned based on a formula CLOSE to:

<table>
<thead>
<tr>
<th>Score</th>
<th>Percent</th>
<th>Score</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>&gt;90</td>
<td>2.5</td>
<td>65</td>
</tr>
<tr>
<td>4.5</td>
<td>85</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>80</td>
<td>1.5</td>
<td>55</td>
</tr>
<tr>
<td>3.5</td>
<td>75</td>
<td>1</td>
<td>25-50</td>
</tr>
<tr>
<td>3</td>
<td>70</td>
<td>0</td>
<td>0-25</td>
</tr>
</tbody>
</table>

At the end of the semester you will have had the opportunity to earn up to 30 points (six numerical scores from 0-5). Your overall grade will be based on the sum of these scores and cutoffs no HIGHER than the following:

<table>
<thead>
<tr>
<th>Score Cutoff</th>
<th>Grade</th>
<th>Score Cutoff</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.5</td>
<td>A</td>
<td>16.5</td>
<td>C</td>
</tr>
<tr>
<td>26.5</td>
<td>A-</td>
<td>15</td>
<td>C-</td>
</tr>
<tr>
<td>25.5</td>
<td>B+</td>
<td>13.5</td>
<td>D+</td>
</tr>
<tr>
<td>22.5</td>
<td>B</td>
<td>10.5</td>
<td>D</td>
</tr>
<tr>
<td>21</td>
<td>B-</td>
<td>9</td>
<td>D-</td>
</tr>
<tr>
<td>19.5</td>
<td>C+</td>
<td>8.99 or lower</td>
<td>F</td>
</tr>
</tbody>
</table>

What I mean by that is that a 27 will be at least an A- but COULD end up an A depending on the circumstances.
Course Structure and Policies

Please note that Covid-19 will have an impact on this class. It has changed how I am structuring class time and the kind of activities that we do in class. It is possible that we will have interruptions that may change the entire delivery and nature of this class. However, two of the most important rules I have put upon myself are "be flexible" and "always ask yourself what is best for your students." If you understand this and have a similar attitude, we should be fine.

As a side note, I DO think that it is completely possible to pass this course (with an A even) without ever setting foot in the classroom. If you have concerns about your health or safety, or if you need to miss class for some other legitimate reason, then you can (and should) stay home and make up the class from the materials posted on my website. Having said that, I think a lot of learning happens in the interaction that will take place in my classroom. Therefore, while attendance is not required it is encouraged if your health allows you to be here.

Scholastic Conduct

You are responsible for being familiar with the University’s Academic Ethics Policies - [https://www.uni.edu/policies/301](https://www.uni.edu/policies/301) The penalty for violating these policies will vary from zero credit on the CA/CD on the first offense up to a failing grade for the course. If an assignment makes you realize you don't understand the material, ask a fellow student a question designed to improve your understanding, not one designed to get the assignment done. Your final submission for assignments should be individual, original work unless otherwise specified. Any substantive contribution to your solution by another person should be properly acknowledged in writing. Failure to do so is plagiarism and will necessitate disciplinary action. In addition to the activities we can all agree are cheating (plagiarism, bringing notes to a closed book exam, etc), assisting or collaborating on cheating is cheating. Cheating can result in failing the course and/or more severe disciplinary actions.

Accessibility

The University of Northern Iowa (UNI) complies with the Americans with Disabilities Act Amendments Act of 2008 (ADAAA), Section 504 of the Rehabilitation Act of 1973, the Fair Housing Act, and other applicable federal and state laws and regulations that prohibit discrimination on the basis of disability. To request accommodations please contact Student Accessibility Services (SAS), located at ITTC 007, for more information either at (319) 273-2677 or email accessibilityservices@uni.edu. Visit [https://sas.uni.edu/](https://sas.uni.edu/) for additional information.

Covid-19 Statement

Protecting our campus from COVID-19 depends on all of us acting with care and responsibility. To protect each other and our campus community, we are required to wear masks or face shields that cover our mouths and noses inside all campus buildings, including throughout the duration of class. We are asked to self-screen for COVID-19 symptoms, stay away from others and seek medical attention if we’re not feeling well and/or experience any symptoms such as a fever over 100.4, and to communicate and plan proactively to make up for missed learning. We will maintain physical distancing by sitting in designated areas in the classroom. In order to facilitate contact tracing, Black Hawk County requires us to sit in assigned seats, and you are asked to adhere to your assigned seat. If your assigned seat does not work well for you, please notify me immediately so that we can work together to reassign you. Failure to follow these requirements can result in students being referred to the student conduct process and faculty being referred to the Associate Provost for Faculty. We take these steps together recognizing that my mask protects you, your mask protects me, and together wearing masks protects the entire UNI community. Our collective actions will determine our ability to remain together in an in-person learning environment.