<table>
<thead>
<tr>
<th></th>
<th>Course Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CIS 120 Introduction to Web Development</td>
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</tr>
<tr>
<td>2</td>
<td>CMSC 150 Introduction to Programming</td>
<td>11</td>
</tr>
<tr>
<td>3</td>
<td>CIS 160: Intro to the Creation of 3-D Movies and Graphics</td>
<td>21</td>
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<tr>
<td>4</td>
<td>CIS 320 Advanced Web Development and Security</td>
<td>27</td>
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<td>5</td>
<td>CMSC 340 Computer Networking</td>
<td>35</td>
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<tr>
<td>6</td>
<td>CMSC 385 Capstone</td>
<td>41</td>
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<td>7</td>
<td>CIS 385 Capstone</td>
<td>47</td>
</tr>
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<td>8</td>
<td>CMSC 386 Capstone</td>
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<td>CIS 390AG - Advanced Gaming</td>
<td>71</td>
</tr>
</tbody>
</table>
Contents:
1.1 Course Details

- Course title: CIS 120 Introduction to Web Development
- Catalog course description: This class introduces the technologies behind web development. Students will learn HTML and CSS to target websites for web, mobile, and print media. Students will learn about usability, color theory, layout, and internationalization. Students will also learn to collaborate with other students by communication in meetings, documents, and by using version control. Students will learn to manage files and deploy websites onto the cloud. COLLABLDR. Four credits. Offered every fall.
- Course level student learning objectives (SLOs):
  - Learn and use Distributed Version Control Systems (DVCS)
  - Use to collaborate with multiple people using DVCS
  - Learn and use HTML
  - Learn and use CSS
  - Learn and use to navigate file systems
  - Learn and use basic command-line for Windows and Linux
  - Learn the theory behind application servers
  - Learn and use single server and cloud hosting for web sites
  - Learn how the Domain Name System (DNS) works
  - How to create high-performance websites
  - Learn and use Content Management Systems (CMS)
  - Learn and use static content generators
- Textbook: https://web-development-class.readthedocs.io/
1.1.1 Note

There are many different areas of web development. We will be just scratching the surface of the subject. We will cover the main types of technical web development, except for programming. Programming for the web is covered in the second semester.

Note: Most people find this class starts out hard and gets easier.

We will cover:

- Version Control (hard)
- Server/Cloud Setup (hard)
- HTML (medium)
- CSS (medium)
- Content Management Systems (easier)
- Static Content Generators (easy)

Just like a survey course in Sports, History, or Religion, you may find there are parts of this that you like and wish we covered more, and others less. Imagine you got to teach a course labeled “Sports” in college. What sports would you cover? And in how much depth? What sports would you have students try out?

1.2 Instructor

- Instructor Name: Paul Vincent Craven
- Instructor Office Hours:
  - 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.
  - I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.
- Instructor Contact Information:
  - E-mail: paul.craven@simpson.edu
  - Office: Carver 333 (Second floor, Carver Science Building)
  - Phone: 515-961-1834

1.3 Schedule

Class meets Tuesday and Thursday from 8:00 am until 9:30 am.
1.3.1 Academic Calendar

<table>
<thead>
<tr>
<th>Fall Semester 2018</th>
<th>Date</th>
</tr>
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<tbody>
<tr>
<td>Classes Begin</td>
<td>Aug-28</td>
</tr>
<tr>
<td>Convocation</td>
<td>Aug-29</td>
</tr>
<tr>
<td>Labor Day</td>
<td>Sep-03</td>
</tr>
<tr>
<td>Last Day to Add/Drop</td>
<td>Sep-04</td>
</tr>
<tr>
<td>Fall Break</td>
<td>Oct 25-26</td>
</tr>
<tr>
<td>Last Day to Withdraw</td>
<td>Nov-06</td>
</tr>
<tr>
<td>Thanksgiving Break</td>
<td>Nov 21-23</td>
</tr>
<tr>
<td>Last day of class</td>
<td>Dec-07</td>
</tr>
<tr>
<td>College Reading Day</td>
<td>Dec 10</td>
</tr>
<tr>
<td>Final Exam Week</td>
<td>Dec 11-14</td>
</tr>
</tbody>
</table>

1.4 Student Assessment

1.4.1 Assignment Submission

- Assignments must be submitted on-line via Simpson’s Scholar website.
- Assignments are not accepted via e-mail.
- Source code will be checked into Bitbucket.
  - This will require a free account on Bitbucket.
- A live web server must be maintained using Amazon Web Services.
  - This will require an AWS account linked to a credit card. AWS offers one year of very basic level service free. If you are past that year there will be a nominal charge.
  - Make sure you shut down your servers at the end of class so you don’t keep getting charged.
  - See the instructor if you are not able set up your own server.

1.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.

**Danger:** Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high.

- Scholar will not show your attendance penalty, if that applies.
- If there is a missing grade that hasn’t been set at zero, then Scholar will not show that in the average. For example, if there are 10 assignments, each worth 100 points, but one is missing, Scholar will show your average as 100 instead of 90. I do try to go back and enter zero on missing assignments so Scholar shows the correct grade, but sometimes that isn’t practical.
- I’ve had a few semesters where the average score presented by Scholar is pure fiction, I’m not sure why.

If you want to calculate your grade, total up your points, divide by the total possible. Then take into account any attendance policy penalty. See the attendance policy.
1.4.3 Grading Scale

Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.

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<tr>
<td>86-83%</td>
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<tr>
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<tr>
<td>79-77%</td>
<td>C+</td>
</tr>
<tr>
<td>76-73%</td>
<td>C</td>
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<tr>
<td>72-70%</td>
<td>C-</td>
</tr>
<tr>
<td>69-67%</td>
<td>D+</td>
</tr>
<tr>
<td>66-63%</td>
<td>D</td>
</tr>
<tr>
<td>62-60%</td>
<td>D-</td>
</tr>
<tr>
<td>59-0%</td>
<td>F</td>
</tr>
</tbody>
</table>

1.4.4 Late-Work/Make-up Work Policy

• All work must be turned in on-time.

• Late work is not accepted, unless approved ahead of time by the instructor.

• All work must be turned in by the end of the time scheduled for the class final. No extensions beyond this date/time are given unless you have a form filled out and signed for an “incomplete.”

• Extra-credit / make up work is not offered.

• If you need to use the lab for doing work, make sure to understand when the lab is open. The McNeill lab is usually closed on Sunday nights, and assignments are due Monday morning. Not knowing when the lab is open is not accepted as an excuse.

• If you are asked to use git to turn in homework, make sure you understand how to merge code. It isn’t fun to have git reject your push when trying to finish it up the night before it is due.

1.4.5 Attendance/Participation Policy

A student may miss three classes unexcused without penalty. After three unexcused absences, a student’s final grade will be lowered 3% for each class missed, not including the original three. So missing five classes will be a 6% penalty on the final grade.

Excused absences are those approved by the Academic Dean, or by prior permission of the instructor. Absences for sporting event functions are normally run through Dean’s office. E-mail me that you will be gone so that I can check you off as excused.

Danger: To be counted as attending class, the student must be present when the instructor takes attendance. Continually showing up to class late can really hurt a student’s grade. If a student leaves class early without prior permission, he or she will be counted as absent.
### 1.4.6 Assignments

Assignments are usually worth 10 points, and quizzes worth 5 points. The assignments and quizzes will be:

- Assignment 1 - Basic HTML
- Assignment 2 - DVCS
- Assignment 3 - CSS
- Assignment 4 - Bootstrap
- Assignment 5 - Project Finalization
- Assignment 6 - AWS assignment
- Assignment 7 - Using PHP “include”
- Assignment 8 - DNS and Web Site Performance
- Assignment 9 - WordPress Install
- Assignment 10 - WordPress
- Assignment 11 - Static Content Generators
- Assignment 12 - Collaborative Leadership Reflection
- Quiz 1 - HTML
- Quiz 2 - DVCS
- Quiz 3 - CSS
- Quiz 4 - Command Line
- Quiz 5 - Amazon Web Services
- Quiz 6 - DNS and Cloud Hosting Quiz

Due dates will be listed out on the class website.

### 1.5 Course Assessment

#### 1.5.1 Engaged Citizenship

#### 1.5.2 Collaborative Leadership (CL)

The Collaborative Leadership component increases students’ confidence in working in groups for a shared goal and helps students develop skills and dispositions like team building, delegation, conflict resolution, and effective communication. This skill is essential in a world where problems are complex and interdependent, and where teamwork is often required to unite diverse groups behind a shared goal.

Through completion of a CL course, students should be able to articulate the skills and dispositions necessary to achieve a shared goal apply the skills and dispositions necessary for effective collaboration explain how their strengths and weaknesses in collaboration affect the outcome of a collaborative leadership process.

A student who completes a CL course will be able to...
<table>
<thead>
<tr>
<th>Student Learning Objective (SLO)</th>
<th>Class activities directly relating to this SLO</th>
<th>Student work to be evaluated for this SLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL SLO1. Articulate</td>
<td>articulate the skills and dispositions necessary to achieve a shared goal</td>
<td>Lecture, quizzes, labs</td>
</tr>
<tr>
<td>Clarify</td>
<td>Reflection</td>
<td></td>
</tr>
<tr>
<td>CL SLO2. Apply</td>
<td>apply the skills and dispositions necessary for effective collaboration</td>
<td>Lecture, quizzes, labs</td>
</tr>
<tr>
<td>Assignments 5 - Finalize Lab</td>
<td>Assignment 5 - Finalize Lab</td>
<td></td>
</tr>
<tr>
<td>CL SLO3. Explain</td>
<td>explain how their strengths and weaknesses in collaboration affect the outcome of a collaborative leadership process</td>
<td>Lecture, quizzes, labs</td>
</tr>
<tr>
<td>Reflection</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1.5.3 Student Learning Outcomes for the Major

**CIS Major SLO #1:** Apply and manage computer systems to meet business objectives.

**CIS Major SLO #2:** Create and manage computer systems utilizing a variety of information technologies.

1.5.4 Contact Hours and Learning Time

CIS 120 meets two times per week. Class covers 14 weeks, with two days off due to break, giving a total of 25 classes. At 90 minutes per class, that’s 37.5 hours of meeting time.

There are a total of 12 assignments. Each assignment should take approximately eight hours of work. This will add up to about 96 hours of work.

Total time spent on the class should be about 134 hours.

1.6 Policies and Procedures

1.6.1 Course Continuity Plan

Should the normal instructional activity on the campus be shortened or interrupted by a campus-wide closing, students will receive information from the instructor or other representative of the college about when and if the course might be continued or completed via Internet, telephone, or United States mail.

1.6.2 Academic Integrity

**Simpson’s Statement:** In all endeavors, Simpson College expects its students to adhere to the strictest standards of honesty and integrity. In keeping with the College’s mission to develop the student’s critical intellectual skills, while fostering personal integrity and moral responsibility, each student is expected to abide by the Simpson College rules for academic integrity. Academic dishonesty includes (but is not limited to) any form of cheating, plagiarism, unauthorized collaboration, misreporting any absence as college-sponsored or college-sanctioned, submitting a paper written in whole or in part by someone else, or submitting a paper that was previously submitted in whole or in substantial part for another class without prior permission. If the student has any questions about whether any action would constitute academic dishonesty, it is imperative that he or she consult the instructor before taking the action. **All cases of substantiated academic dishonesty must be reported to the student’s academic advisor and the Dean for Academic Affairs.** For further guidance on these rules and their sanctions, please see the college catalog.
**My addition:** Students are strongly encouraged to work with one another on homework; however, blatant copying of assignments will be considered cheating.

If I get two assignments that are the same thing, both people will get zeros. Guard your homework carefully, so it is not used as a source for cheating. Don’t e-mail it to a friend so they can ‘use it to learn’ or ‘as a template’. Don’t allow someone to simply read off what you have on your computer screen. By allowing someone to cheat, that will allow the person to get behind in what they understand, and they will never catch up.

A student caught cheating will either get a zero for the assignment, have his/her over-all letter grade reduced, or be flunked from the course. Cheating students may be required to do extra work.

The instructor keeps a database of prior assignments and assignments commonly found on the Internet. The instructor will periodically run scans to look for duplicate assignments. We catch students cheating every. single. year. Don’t do it.

Regardless, cheating is like paying for a gym membership, and then sending someone else to work out for you. It doesn’t make sense. You aren’t going to get stronger that way.

### 1.6.3 Accommodations for Students with Accessibility Needs

I want everyone in this class to be successful. If you have a physical, sensory, learning, or psychological disability that can interfere with your learning, I want you to receive the accommodations to which you are entitled by law. In order for me to do provide accommodations to a student, the student’s disability must be documented with the Student Accessibility Office. I cannot assist a student with accommodations that I don’t know are needed, so if you need something, please make sure that you either contact me or that you ask Simpson’s Student Accessibility Coordinator, to do so on your behalf. If you have any further questions on the policies and services for students with disabilities, please refer to the academic catalog or go to [http://simpson.edu/academics/student-accessibility/](http://simpson.edu/academics/student-accessibility/)

### 1.6.4 Inclusive Explanation Statement

In this course, each voice in the classroom has something of value to contribute. Please take care to respect the different experiences, beliefs, and values expressed by students and staff involved in this course. We support Simpson’s commitment to diversity, and welcome individuals of all ages, backgrounds, citizenships, disabilities, sex, education, ethnicities, family statuses, genders, gender identities, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences.

### 1.6.5 Sexual and Relationship Misconduct

Simpson College strives to create an environment free from sexual or relationship misconduct of any kind; and in which those who have experienced sexual misconduct get the help and support they need. Simpson’s Sexual and Relationship Misconduct Policy outlines expectations the college has students and employees, including faculty. In order to do all that we can to maintain a safe campus community, and in compliance with Federal law, all employees of the college are expected to report knowledge of alleged sexual misconduct to the Title IX Coordinator. Therefore, if you reveal to me, in conversation, writing, class discussion, or in any other manner, that you have experienced sexual misconduct it is my obligation to share that information with the Title IX Coordinator on our campus. Please know that if this is a step that needs to be taken, I will do my best to involve you in that process so that you know what to expect as a result of the communication with the Title IX Coordinator. To learn more about the expectations the college has of you with respect to sexual misconduct, you can find the full policy here:

2.1 Course Details

• Course title: CMSC 150 Introduction to Programming

• Catalog course description: This course introduces computer programming, emphasizing algorithm design and implementation using conditionals, loops, functions, recursion, and object oriented programming. The course is taught in Python. Prerequisite: One of the following: Math 105/105T Quantitative Reasoning, Math ACT of 22 or higher, or Math SAT of 530 or higher. QUANT. Four credits. Offered every semester.

• Course level student learning objectives (SLOs):
  – Variables and expressions
  – Branching logic
  – Simple looping
  – Complex nested looping
  – Graphical coordinate system
  – Simple version control system use
  – Basic theory behind how computer languages work
  – Linear and binary search
  – Arrays
  – Two-dimensional arrays
  – Exceptions
  – Print formatting
  – Classes
  – Insertion and selection sort
  – Proper coding style and techniques
– Debugging techniques
– Using and creating libraries


2.2 Instructor

• Instructor Name: Paul Vincent Craven
• Instructor Office Hours:
  – 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.
  – I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.
• Instructor Contact Information:
  – E-mail: paul.craven@simpson.edu
  – Office: Carver 333 (Second floor, Carver Science Building)
  – Phone: 515-961-1834

2.3 Schedule

Class meets:
• Section A: MWF from 8:00 am until 9:00 am

Class also has a required lab.
• Section Z: Thur 2:10 pm - 3:40 pm

2.3.1 Academic Calendar

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring Semester 2019</td>
<td></td>
</tr>
<tr>
<td>Classes Begin</td>
<td>Jan-14</td>
</tr>
<tr>
<td>Last Day to Add/Drop</td>
<td>Jan-18</td>
</tr>
<tr>
<td>MLK day. Altered schedule</td>
<td>Jan-21</td>
</tr>
<tr>
<td>Mid-Term Date</td>
<td>Mar-06</td>
</tr>
<tr>
<td>Mid-Term Grades Due</td>
<td>Feb-28</td>
</tr>
<tr>
<td>Spring Break</td>
<td>Mar 9-17</td>
</tr>
<tr>
<td>Last Day to Withdraw</td>
<td>Mar-27</td>
</tr>
<tr>
<td>Campus Day</td>
<td>Apr-03</td>
</tr>
<tr>
<td>Easter Recess</td>
<td>Apr-22</td>
</tr>
<tr>
<td>Honors Convocation Ceremony</td>
<td>Apr-24</td>
</tr>
<tr>
<td>Research Symposium (No Class)</td>
<td>Apr-25</td>
</tr>
<tr>
<td>Last Day of Class</td>
<td>Apr-26</td>
</tr>
<tr>
<td>College Reading Day</td>
<td>Apr-29</td>
</tr>
<tr>
<td>Spring Final Exam Week</td>
<td>Apr-30 to May-02</td>
</tr>
<tr>
<td>Commencement</td>
<td>May-04</td>
</tr>
<tr>
<td>All Spring Grades Due</td>
<td>May-07</td>
</tr>
</tbody>
</table>
2.4 Student Assessment

2.4.1 Assignment Submission

- Assignments must be submitted online via Simpson’s Scholar website.
- Assignments are not accepted via e-mail.
- Source code will be checked into Bitbucket.
  - This will require a free account on Bitbucket.

2.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, that is subtracted next.

**Danger:** Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high.

- Scholar will not show your attendance penalty, if that applies.
- If there is a missing grade that hasn’t been set at zero, then Scholar will not show that in the average. For example, if there are 10 assignments, each worth 100 points, but one is missing, Scholar will show your average as 100 instead of 90. I do try to go back and enter zero on missing assignments so Scholar shows the correct grade, but sometimes that isn’t practical.
- I’ve had a few semesters where the average score presented by Scholar is pure fiction, I’m not sure why.

If you want to calculate your grade, total up your points, divide by the total possible. Then take into account any attendance policy penalty. See the attendance policy.

2.4.3 Grading Scale

Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.

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2.4.4 Late-Work/Make-up Work Policy

- All work must be turned in on-time.
- Late work is not accepted, unless approved ahead of time by the instructor.
- All work must be turned in by the end of the time scheduled for the class final. No extensions beyond this date/time are given unless you have a form filled out and signed for an “incomplete.”
- Extra-credit / make up work is not offered.
- If you need to use the lab for doing work, make sure to understand when the lab is open. The McNeill lab is usually closed on Sunday nights, and assignments are due Monday morning. Not knowing when the lab is open is not accepted as an excuse.
- If you are asked to use git to turn in homework, make sure you understand how to merge code. It isn’t fun to have git reject your push when trying to finish it up the night before it is due.

2.4.5 Attendance/Participation Policy

(For classes with lab.)
A student may miss three classes unexcused without penalty. After three unexcused absences, a student’s final grade will be lowered 2% for each class missed, not including the original three. So missing five classes will be a 4% penalty on the final grade.

Excused absences are those approved by the Academic Dean, or by prior permission of the instructor. Absences for sporting event functions are normally run through Dean’s office. E-mail me that you will be gone so that I can check you off as excused.

Danger: To be counted as attending class, the student must be present when the instructor takes attendance. If a student leaves class early without prior permission, he or she will be counted as absent.

Because there are two sections for the class, if have to miss one section but can attend the other, please do. Please e-mail me a note so I can make sure to mark you as having attended.

2.4.6 Assignments

There are three types of assignments:
- Labs - 20 points, except the final lab which is 60 points
- Quizzes - 10 points
- On-line coding problems

The on-line coding problems are new, and I’m not sure how often we will have them, or how they will be graded. Right now I am leaning towards two points per problem, with an assortment of problems due at the same time as these problems below.

Assignments are due by the time indicated below:
- Monday, Jan 21 at 8 am:
  - Lab 1: First Program (Initial setup, BitBucket check-in, and simple program.)
  - Quiz 1
- Monday, Jan 28 at 8 am:
– Lab 2: Draw a Picture
  – Quiz 2
• Monday, Feb 4 at 8 am:
  – Lab 3: Drawing with Functions
  – Quiz 3
• Monday, Feb 11 at 8 am:
  – Lab 4: Camel (Loops and Conditional Statements)
  – Quiz 4
• Monday, Feb 18 at 8 am:
  – Lab 5: Loopy Lab (Nested Loops)
  – Quiz 5
• Monday, Feb 25 at 8 am:
  – Lab 6: Text Adventure (Nested Loops, Text as Arrays)
  – Quiz 6
• Monday, Mar 4 at 8 am:
  – Lab 7: User Control (Joysticks and Keyboard Input)
  – Quiz 7
• March 10-16 - Spring Break
• Tuesday, March 19 at 8 am (after spring break):
  – Lab 8: Sprites (Classes)
  – Quiz 8
• Monday, March 25 at 8 am:
  – Lab 9: Sprites and Walls (Classes)
  – Quiz 9
• Monday, April 1 at 8 am:
  – Lab 10: Spell Check (Linear and Binary Search)
  – Quiz 10
• Monday, April 8 at 8 am:
  – Lab 11: Array-Backed Grids (Two-Dimensional Arrays)
  – Quiz 11
• Monday, Apr 15 at 8 am:
  – Lab 12: Work on Final Lab
  – Quiz 12
• Monday, April 22 at 8 am:
  – Quantitative Reasoning Reflection (20 points)
  – Quiz 13

2.4. Student Assessment
• Wednesday May 1 at 12:15 pm:
  – Lab 12 - Final project due. No meeting for final. (60 points)

Note: Labs can be resubmitted once for more points.

Labs may be resubmitted for a regrade up to one week after they are graded. So if you turn in an assignment on the 8th and it is graded on the 10th at 10 am, then it can be fixed and submitted for a regrade any time up to the 17th at 10 am.

To resubmit a lab you must resubmit it for grading on Scholar. Otherwise I won’t know to grade it. Committing and pushing the file to Bitbucket isn’t enough.

You may only resubmit a lab once, unless the first time was just a missing graphic or something like that.

Exceptions: Time during Spring Break isn’t counted towards the seven days. All assignments and regrades must be in by Wednesday May 1, 12:15pm, even if you didn’t get seven days.

2.5 Course Assessment

2.5.1 Engaged Citizenship

2.5.2 Quantitative Reasoning (QR)

Quantitative reasoning is the application of quantitative concepts and skills to solve real-world problems for the purpose of making decisions. To effectively use quantitative reasoning requires understanding how to interpret, evaluate, and use various types of quantitative information in order to support a position or argument. It includes the ability to express quantitative information visually, symbolically, numerically and verbally (including written or oral communication).

In order to perform effectively as professionals and citizens, students must become competent in reading and using quantitative data, in understanding quantitative evidence and in applying quantitative skills to the solution of real-life problems such as choosing the financing for a new home, how to live a sustainable lifestyle, and whether to vote for or against a specific tax. The purpose of embedding the Quantitative Reasoning skills in application courses is to provide our students with quantitative problem-solving experiences at the college level within the context of the content of other college courses. The goal is to instill long-term patterns of interaction and engagement with quantitative problem solving.

A student who completes a QR course will be able to . . .
### 2.5.3 Student Learning Outcomes for the Major

**CMSC Major SLO #1:** Design, implement, and analyze computational algorithms.

**CMSC Major SLO #2:** Design computer systems, implement algorithms as part of those systems, and create well-written and documented programs.

### 2.5.4 Contact Hours and Learning Time

- Class meets 3 times a week, each time for 1 hour. There are a total of 40 classes. This totals 40 x 1 = 40 hours.
- There are 13 lab sessions, each for 1.5 hours, totaling 19.5 hours.
- Each lab should take another 2 hours, totaling 26 more hours. The last lab should take an additional 4 hours for 30 total hours.
- There are 13 quizzes. Taking each quiz should take about 30 minutes, for 7.5 hours.
- Reading and reviewing for class should take 3 hours each week, for 39 hours total.
- Total time spent on the class should be about 136 hours. This could be more or less depending on talent, and desired grade.

### 2.6 Policies and Procedures

#### 2.6.1 Course Continuity Plan

Should the normal instructional activity on the campus be shortened or interrupted by a campus-wide closing, students will receive information from the instructor or other representative of the college about when and if the course might be continued or completed via Internet, telephone, or United States mail.
2.6.2 Academic Integrity

**Simpson’s Statement:** In all endeavors, Simpson College expects its students to adhere to the strictest standards of honesty and integrity. In keeping with the College’s mission to develop the student’s critical intellectual skills, while fostering personal integrity and moral responsibility, each student is expected to abide by the Simpson College rules for academic integrity. Academic dishonesty includes (but is not limited to) any form of cheating, plagiarism, unauthorized collaboration, misreporting any absence as college-sponsored or college-sanctioned, submitting a paper written in whole or in part by someone else, or submitting a paper that was previously submitted in whole or in substantial part for another class without prior permission. If the student has any questions about whether any action would constitute academic dishonesty, it is imperative that he or she consult the instructor before taking the action. **All cases of substantiated academic dishonesty must be reported to the student’s academic advisor and the Dean for Academic Affairs.** For further guidance on these rules and their sanctions, please see the college catalog.

**My addition:** Students are strongly encouraged to work with one another on homework; however, blatant copying of assignments will be considered cheating.

If I get two assignments that are the same thing, both people will get zeros. Guard your homework carefully, so it is not used as a source for cheating. Don’t e-mail it to a friend so they can ‘use it to learn’ or ‘as a template’. Don’t allow someone to simply read off what you have on your computer screen. By allowing someone to cheat, that will allow the person to get behind in what they understand, and they will never catch up.

A student caught cheating will either get a zero for the assignment, have his/her over-all letter grade reduced, or be flunked from the course. Cheating students may be required to do extra work.

The instructor keeps a database of prior assignments and assignments commonly found on the Internet. The instructor will periodically run scans to look for duplicate assignments. We catch students cheating every. single. year. Don’t do it.

Regardless, cheating is like paying for a gym membership, and then sending someone else to work out for you. It doesn’t make sense. You aren’t going to get stronger that way.

2.6.3 Accommodations for Students with Accessibility Needs

I want everyone in this class to be successful. If you have a physical, sensory, learning, or psychological disability that can interfere with your learning, I want you to receive the accommodations to which you are entitled by law. In order for me to do provide accommodations to a student, the student’s disability must be documented with the Student Accessibility Office. I cannot assist a student with accommodations that I don’t know are needed, so if you need something, please make sure that you either contact me or that you ask Simpson’s Student Accessibility Coordinator, to do so on your behalf. If you have any further questions on the policies and services for students with disabilities, please refer to the academic catalog or go to http://simpson.edu/academics/student-accessibility/

2.6.4 Inclusive Explanation Statement

In this course, each voice in the classroom has something of value to contribute. Please take care to respect the different experiences, beliefs, and values expressed by students and staff involved in this course. We support Simpson’s commitment to diversity, and welcome individuals of all ages, backgrounds, citizenships, disabilities, sex, education, ethnicities, family statuses, genders, gender identities, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences.

2.6.5 Sexual and Relationship Misconduct

Simpson College strives to create an environment free from sexual or relationship misconduct of any kind; and in which those who have experienced sexual misconduct get the help and support they need. Simpson’s Sexual and Relationship Misconduct Policy outlines expectations the college has students and employees, including faculty. In
order to do all that we can to maintain a safe campus community, and in compliance with Federal law, all employees of the college are expected to report knowledge of alleged sexual misconduct to the Title IX Coordinator. Therefore, if you reveal to me, in conversation, writing, class discussion, or in any other manner, that you have experienced sexual misconduct it is my obligation to share that information with the Title IX Coordinator on our campus. Please know that if this is a step that needs to be taken, I will do my best to involve you in that process so that you know what to expect as a result of the communication with the Title IX Coordinator. To learn more about the expectations the college has of you with respect to sexual misconduct, you can find the full policy here:

http://simpson.edu/sexual-and-relationship-misconduct-policy/
CHAPTER 3

CIS 160: Intro to the Creation of 3-D Movies and Graphics

3.1 Course Details

- Course title: Introduction to the Creation of 3-D Movies and Graphics
- Catalog course description: This course will introduce students to creating three dimensional graphics. Students will learn to create three dimensional models, and add texture, lighting, and structure. Students will learn how to animate models and create a movie. Students will work individually or in teams to create and publicly present a final project. ART. Four credits. Offered May Term of odd numbered years.
- Course level student learning objectives (SLOs):
  - Technical
    * Learn to model in three dimensions
    * Learn to texture 3D object
    * Learn to light a 3D scene
    * Learn to animate a 3D scene
  - Artistic
    * Learn to express perspectives, concepts, and ideas using 3D computer graphics as a medium.
    * Reflect and think critically about other’s artistic works and your own.
    * Understand the value of the creative process.
    * Express yourself using your own artistic creation.

3.2 Instructor

- Instructor Name: Paul Vincent Craven
• Instructor Office Hours:
  – 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.
  – I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.

• Instructor Contact Information:
  – E-mail: paul.craven@simpson.edu
  – Office: Carver 333 (Second floor, Carver Science Building)
  – Phone: 515-961-1834

3.3 Schedule

Class meets every weekday from 8:30 am until 11:15 am, Monday May 1st to Friday May 19, 2017

Class meetings:

• Day 01 - Introduction and Blender Basics
• Day 02 - Meshes
• Day 03 - Textures and Painting
• Day 04 - Shading
• Day 05 - Lighting
• Day 06 - Modifiers
• Day 07 - Project Plan
• Day 08 - Animation
• Day 09 - Rendering / What is Art?
• Day 10 - Work on Project
• Day 11 - Work on Project / Lumi
• Day 12 - Work on Project
• Day 13 - Work on Project
• Day 14 - Work on Project
• Day 15 - Final Presentations

Assignments:

• Assignment 1 - How Did The Artist Convey The Message?
• Assignment 2 - Mesh Modeling
• Assignment 3 - Back-Story
• Assignment 4 - Shading
• Assignment 5 - Modifiers
• Assignment 6 - Final Project Plan
• Assignment 7 - Animation
• Assignment 8 - What is Art?
• Assignment 9 - Lumi
• Final Project

3.4 Student Assessment

3.4.1 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.

Danger: Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high.

• Scholar will not show your attendance penalty, if that applies.
• If there is a missing grade that hasn’t been set at zero, then Scholar will not show that in the average. For example, if there are 10 assignments, each worth 100 points, but one is missing, Scholar will show your average as 100 instead of 90. I do try to go back and enter zero on missing assignments so Scholar shows the correct grade, but sometimes that isn’t practical.

I’ve had a few semesters where the average score presented by Scholar is pure fiction, I’m not sure why.

If you want to calculate your grade, total up your points, divide by the total possible. Then take into account any attendance policy penalty. See the attendance policy.

3.4.2 Grading Scale

Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.

<table>
<thead>
<tr>
<th>Percent</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-93%</td>
<td>A</td>
</tr>
<tr>
<td>92-90%</td>
<td>A-</td>
</tr>
<tr>
<td>89-87%</td>
<td>B+</td>
</tr>
<tr>
<td>86-83%</td>
<td>B</td>
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<tr>
<td>82-80%</td>
<td>B-</td>
</tr>
<tr>
<td>79-77%</td>
<td>C+</td>
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<tr>
<td>76-73%</td>
<td>C</td>
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<tr>
<td>72-70%</td>
<td>C-</td>
</tr>
<tr>
<td>69-67%</td>
<td>D+</td>
</tr>
<tr>
<td>66-63%</td>
<td>D</td>
</tr>
<tr>
<td>62-60%</td>
<td>D-</td>
</tr>
<tr>
<td>59-0%</td>
<td>F</td>
</tr>
</tbody>
</table>

3.4.3 Late-Work/Make-up Work Policy

• All work must be turned in on-time.
• Late work is not accepted, unless approved ahead of time by the instructor.
• All work must be turned in by the end of the time scheduled for the class final. No extensions beyond this date/time are given unless you have a form filled out and signed for an “incomplete.”

• Extra-credit / make up work is not offered.

• If you need to use the lab for doing work, make sure to understand when the lab is open. The McNeill lab is usually closed on Sunday nights, and assignments are due Monday morning. Not knowing when the lab is open is not accepted as an excuse.

• If you are asked to use `git` to turn in homework, make sure you understand how to merge code. It isn’t fun to have `git` reject your push when trying to finish it up the night before it is due.

3.4.4 May Term Attendance/Participation Policy

A student may miss one class unexcused without penalty. After one unexcused absence, a student’s final grade will be lowered 3% for each class missed, not including the original one. So missing three classes will be a 6% penalty on the final grade.

Excused absences are those approved by the Academic Dean, or by prior permission of the instructor. Absences for sporting event functions are normally run through Dean’s office. E-mail me that you will be gone so that I can check you off as excused.

Note: To be counted as attending class, the student must be present when the instructor takes attendance. If a student during class, he or she will be counted as absent.

3.4.5 Assignments

There will be nine assignments, plus a final project. Each assignment is worth ten points, for a total of ninety points. The final assignment is worth one hundred points. The class will be graded out of 190 points total.

3.5 Course Assessment

3.5.1 Engaged Citizenship Grids

3.5.2 The Arts (AR)

The arts are a vital component of human existence. They provide an opportunity to experience and express the world in ways distinct from other disciplines. The Arts component of the General Education curriculum focuses on learning through participation in artistic creation. By taking a course that engages students in the act of creation, students will develop an understanding of art as a constructed means for communication, designed to reveal certain meanings and ideas or to elicit specific responses. Students are given the opportunity to develop their imaginations and to develop their ability to express themselves.

The general education program prepares students to become engaged citizens by exploring enduring questions about ourselves, civilization, and the world and by developing the skills necessary to shape and create a diverse and just community. As an organizing principle, citizenship encourages an emphasis on issues of personal integrity, moral responsibility and social justice. The arts have long been instrumental in the exploration and pursuit of engaged citizenship.

A student who completes an AR course will be able to…


### Student Learning Objective (SLO)

<table>
<thead>
<tr>
<th>SLO</th>
<th>Description</th>
<th>Class activities directly relating to this SLO</th>
<th>Student work to be evaluated for this SLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR SLO1.</td>
<td>Express perspectives, concepts and/or ideas through an artistic medium</td>
<td>Lessons, assignments</td>
<td>Final Project</td>
</tr>
<tr>
<td>AR SLO2.</td>
<td>Reflect and think critically about one’s own and others’ artistic work(s) employing vocabulary and evaluative skills appropriate to the genre.</td>
<td>Lecture, assignments</td>
<td>Reflection turned in with final project</td>
</tr>
<tr>
<td>AR SLO3.</td>
<td>Articulate the value of the creative process</td>
<td>Lecture, assignments</td>
<td>Reflection turned in with final project</td>
</tr>
</tbody>
</table>

### 3.5.3 Contact Hours and Learning Time

- In class time: 3 hours per day, 3 weeks, 5 days per week = 45 hours
- Out-of-class video tutorial time: 2 hours per day, 3 weeks, 5 days per week = 30 hours
- Out-of-class time spent on creating 3D graphics: 3 weeks, 5 days per week = 45 hours

Total time = 45 + 30 + 45 = 120 hours.

### 3.6 Policies and Procedures

#### 3.6.1 Course Continuity Plan

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Simpson College strives to create an environment free from sexual or relationship misconduct of any kind; and in which those who have experienced sexual misconduct get the help and support they need. Simpson’s Sexual and Relationship Misconduct Policy outlines expectations the college has students and employees, including faculty. In order to do all that we can to maintain a safe campus community, and in compliance with Federal law, all employees of the college are expected to report knowledge of alleged sexual misconduct to the Title IX Coordinator. Therefore, if you reveal to me, in conversation, writing, class discussion, or in any other manner, that you have experienced sexual misconduct it is my obligation to share that information with the Title IX Coordinator on our campus. Please know that if this is a step that needs to be taken, I will do my best to involve you in that process so that you know what to expect as a result of the communication with the Title IX Coordinator. To learn more about the expectations the college has of you with respect to sexual misconduct, you can find the full policy here:

http://simpson.edu/sexual-and-relationship-misconduct-policy/
4.1 Course Details

- Course title:
  CIS 320 Advanced Web Development and Security
- Catalog course description:
  This class covers server and client side programming and security. Students learn to create, read, update, and delete records in a database through a website. Students learn how manage security with data validation and encoding, session management, encryption, hashing, and understanding common security vulnerabilities. Students will learn to fine, use, and integrate common code libraries and applications into their website. Prerequisites: CIS 120, CMSC 150, and CIS 255. WRITCOMM. Four credits. Offered every spring of odd numbered years.
- Course level student learning objectives (SLOs):
  - Learn to create web applications that can create, read, update, and delete records from a database.
  - Learn to validate information both on the server side and on the client side.
  - Learn how to protect against common security vulnerabilities.
  - Learn both encryption and hashing.
  - Learn to authenticate and authorize users and manage session information.
  - Learn to manage a server stack.
  - Learn to write tutorials, and to create a security plan.
- Textbook is on-line: http://web-development-class.readthedocs.io

4.2 Instructor

- Instructor Name: Paul Vincent Craven
• Instructor Office Hours:
  – 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.
  – I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.

• Instructor Contact Information:
  – E-mail: paul.craven@simpson.edu
  – Office: Carver 333 (Second floor, Carver Science Building)
  – Phone: 515-961-1834

4.3 Schedule

Class meets Tuesday/Thursday from 8:00 am until 9:30 am.

4.3.1 Academic Calendar

<table>
<thead>
<tr>
<th>Spring Semester 2019</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes Begin</td>
<td>Jan-14</td>
</tr>
<tr>
<td>Last Day to Add/Drop</td>
<td>Jan-18</td>
</tr>
<tr>
<td>MLK day, Altered schedule</td>
<td>Jan-21</td>
</tr>
<tr>
<td>Mid-Term Date</td>
<td>Mar-06</td>
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<tr>
<td>Mid-Term Grades Due</td>
<td>Feb-28</td>
</tr>
<tr>
<td>Spring Break</td>
<td>Mar 9-17</td>
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<tr>
<td>Last Day to Withdraw</td>
<td>Mar-27</td>
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<tr>
<td>Campus Day</td>
<td>Apr-03</td>
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<tr>
<td>Easter Recess</td>
<td>Apr-22</td>
</tr>
<tr>
<td>Honors Convocation Ceremony</td>
<td>Apr-24</td>
</tr>
<tr>
<td>Research Symposium (No Class)</td>
<td>Apr-25</td>
</tr>
<tr>
<td>Last Day of Class</td>
<td>Apr-26</td>
</tr>
<tr>
<td>College Reading Day</td>
<td>Apr-29</td>
</tr>
<tr>
<td>Spring Final Exam Week</td>
<td>Apr-30 to May-02</td>
</tr>
<tr>
<td>Commencement</td>
<td>May-04</td>
</tr>
<tr>
<td>All Spring Grades Due</td>
<td>May-07</td>
</tr>
</tbody>
</table>

4.4 Student Assessment

4.4.1 Assignment Submission

• Assignments must be submitted on-line via Simpson’s Scholar website.
• Assignments are not accepted via e-mail.
• Source code will be checked into GitHub.
  – This will require a free account on GitHub.
• A live web server must be maintained using Amazon Web Services.
– This will require an AWS account linked to a credit card. AWS offers one year of very basic level service free. If you are past that year there will be a nominal charge.
– Make sure you shut down your servers at the end of class so you don’t keep getting charged.
– See the instructor if you are not able to set up your own server.

4.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.

| Danger: Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high. |

• Scholar will not show your attendance penalty, if that applies.
• If there is a missing grade that hasn’t been set at zero, then Scholar will not show that in the average. For example, if there are 10 assignments, each worth 100 points, but one is missing, Scholar will show your average as 100 instead of 90. I do try to go back and enter zero on missing assignments so Scholar shows the correct grade, but sometimes that isn’t practical.
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If you want to calculate your grade, total up your points, divide by the total possible. Then take into account any attendance policy penalty. See the attendance policy.

4.4.3 Grading Scale

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<tr>
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</table>

4.4.4 Late-Work/Make-up Work Policy

• All work must be turned in on-time.
• Late work is not accepted, unless approved ahead of time by the instructor.
• All work must be turned in by the end of the time scheduled for the class final. No extensions beyond this date/time are given unless you have a form filled out and signed for an “incomplete.”
• Extra-credit / make up work is not offered.
• If you need to use the lab for doing work, make sure to understand when the lab is open. The McNeill lab is usually closed on Sunday nights, and assignments are due Monday morning. Not knowing when the lab is open is not accepted as an excuse.
• If you are asked to use git to turn in homework, make sure you understand how to merge code. It isn’t fun to have git reject your push when trying to finish it up the night before it is due.

4.4.5 Attendance/Participation Policy

A student may miss three classes unexcused without penalty. After three unexcused absences, a student’s final grade will be lowered 3% for each class missed, not including the original three. So missing five classes will be a 6% penalty on the final grade.

Excused absences are those approved by the Academic Dean, or by prior permission of the instructor. Absences for sporting event functions are normally run through Dean’s office. E-mail me that you will be gone so that I can check you off as excused.

Danger: To be counted as attending class, the student must be present when the instructor takes attendance. Continually showing up to class late can really hurt a student’s grade. If a student leaves class early without prior permission, he or she will be counted as absent.

4.4.6 Assignments

• Lab 1: Programming Environment Setup Assignment
• Lab 2: JavaScript Assignment
• Lab 3: List DB Records in JSON Format Assignment
• Lab 4: List Records - Final Assignment
• Lab 5: Form Validation Assignment
• Lab 6: Insert a Record Assignment
• Lab 7: Security Writing
• Lab 8: Back-End Validation and Deleting Records
• Lab 9: Editing a record
• Lab 10: Login Assignment
• Lab 11: Final Lab

There will also be quizzes.

4.5 Course Assessment

4.5.1 Engaged Citizenship Grids

4.5.2 Written Communication (WC)

Written communication is the ability to communicate successfully via handwritten, printed, or electronic text.
Writing is an essential skill that students need in order to comprehend, analyze, and synthesize a variety of texts in a variety of disciplines. In college, students will learn to write in multiple contexts: in the Simpson Colloquiums, in general education courses, in courses for their majors, and in elective courses. Effective writing is also a skill they will find indispensable in their professional lives beyond the undergraduate academic setting.

Engaged citizens rely on strong writing skills, whether they are exploring and developing their own ideas, responding fairly and responsibly to the ideas and perspectives of others, or crafting the polished, compelling and persuasive expression so often necessary to shaping and creating a diverse and just community.

A student who completes a WC course will be able to . . .

<table>
<thead>
<tr>
<th>Student Learning Objective (SLO)</th>
<th>Class activities directly relating to this SLO</th>
<th>Student work to be evaluated for this SLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>WC SLO1. articulate an idea and formulate a thesis as appropriate to the discipline</td>
<td>Lecture, quizzes, labs</td>
<td>Tutorial on how and why to use a new web technology</td>
</tr>
<tr>
<td>WC SLO2. identify and correct errors in grammar and/or style in written communication</td>
<td>Lecture, quizzes, labs</td>
<td>Students review each other’s tutorial draft and turn in a marked-up copy</td>
</tr>
<tr>
<td>WC SLO3. provide credible evidence to support claims and arguments in written communication</td>
<td>Lecture, quizzes, labs</td>
<td>Tutorial on how and why to use a new web technology</td>
</tr>
<tr>
<td>WC SLO4. organize thoughts in a logical fashion in written communication</td>
<td>Lecture, quizzes, labs</td>
<td>Tutorial on how and why to use a new web technology</td>
</tr>
</tbody>
</table>

4.5.3 Student Learning Outcomes for the Major

CIS Major SLO #1: Apply and manage computer systems to meet business objectives.

CIS Major SLO #2: Create and manage computer systems utilizing a variety of information technologies.

CIS Major SLO #3: Design, implement, and modify normalized database systems. Graduates will also know how to maintain and manage database systems.

4.5.4 Contact Hours and Learning Time

CIS 320 meets two times per week. Class covers 14 weeks, with one week of break, and one day off for Honor Symposium giving us a total of 25 classes. At 90 minutes per class, that’s 37.5 hours of meeting time.

There are a total of 13 assignments. Each assignment should take approximately three hours of research and five hours of work. This will add up to about 104 hours of work.

Total time spent on the class should be about 141 hours.

4.6 Policies and Procedures

4.6.1 Course Continuity Plan

Should the normal instructional activity on the campus be shortened or interrupted by a campus-wide closing, students will receive information from the instructor or other representative of the college about when and if the course might be continued or completed via Internet, telephone, or United States mail.
4.6.2 Academic Integrity

Simpson’s Statement: In all endeavors, Simpson College expects its students to adhere to the strictest standards of honesty and integrity. In keeping with the College’s mission to develop the student’s critical intellectual skills, while fostering personal integrity and moral responsibility, each student is expected to abide by the Simpson College rules for academic integrity. Academic dishonesty includes (but is not limited to) any form of cheating, plagiarism, unauthorized collaboration, misreporting any absence as college-sponsored or college-sanctioned, submitting a paper written in whole or in part by someone else, or submitting a paper that was previously submitted in whole or in substantial part for another class without prior permission. If the student has any questions about whether any action would constitute academic dishonesty, it is imperative that he or she consult the instructor before taking the action. All cases of substantiated academic dishonesty must be reported to the student’s academic advisor and the Dean for Academic Affairs. For further guidance on these rules and their sanctions, please see the college catalog.

My addition: Students are strongly encouraged to work with one another on homework; however, blatant copying of assignments will be considered cheating.

If I get two assignments that are the same thing, both people will get zeros. Guard your homework carefully, so it is not used as a source for cheating. Don’t e-mail it to a friend so they can ‘use it to learn’ or ‘as a template’. Don’t allow someone to simply read off what you have on your computer screen. By allowing someone to cheat, that will allow the person to get behind in what they understand, and they will never catch up.

A student caught cheating will either get a zero for the assignment, have his/her over-all letter grade reduced, or be flunked from the course. Cheating students may be required to do extra work.

The instructor keeps a database of prior assignments and assignments commonly found on the Internet. The instructor will periodically run scans to look for duplicate assignments. We catch students cheating every. single. year. Don’t do it.

Regardless, cheating is like paying for a gym membership, and then sending someone else to work out for you. It doesn’t make sense. You aren’t going to get stronger that way.

4.6.3 Accommodations for Students with Accessibility Needs

I want everyone in this class to be successful. If you have a physical, sensory, learning, or psychological disability that can interfere with your learning, I want you to receive the accommodations to which you are entitled by law. In order for me to do provide accommodations to a student, the student’s disability must be documented with the Student Accessibility Office. I cannot assist a student with accommodations that I don’t know are needed, so if you need something, please make sure that you either contact me or that you ask Simpson’s Student Accessibility Coordinator, to do so on your behalf. If you have any further questions on the policies and services for students with disabilities, please refer to the academic catalog or go to http://simpson.edu/academics/student-accessibility/

4.6.4 Inclusive Explanation Statement

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4.6.5 Sexual and Relationship Misconduct

Simpson College strives to create an environment free from sexual or relationship misconduct of any kind; and in which those who have experienced sexual misconduct get the help and support they need. Simpson’s Sexual and Relationship Misconduct Policy outlines expectations the college has students and employees, including faculty. In
order to do all that we can to maintain a safe campus community, and in compliance with Federal law, all employees of the college are expected to report knowledge of alleged sexual misconduct to the Title IX Coordinator. Therefore, if you reveal to me, in conversation, writing, class discussion, or in any other manner, that you have experienced sexual misconduct it is my obligation to share that information with the Title IX Coordinator on our campus. Please know that if this is a step that needs to be taken, I will do my best to involve you in that process so that you know what to expect as a result of the communication with the Title IX Coordinator. To learn more about the expectations the college has of you with respect to sexual misconduct, you can find the full policy here:

http://simpson.edu/sexual-and-relationship-misconduct-policy/
5.1 Course Details

- Course title: CMSC 340 Computer Networking
- Catalog course description:

  This course of study in computer networks concentrates on typical hardware interfaces, programming methods, and communications protocols. Topics considered in detail include electrical interfaces, data transmission, protocol stacks, data link protocols, local area networks, wide area networks, internetworking, transport protocols, application support, firewalls, virus scanning, and virtual private networks. Prerequisite: Computer Science 150 Fundamentals of Computing I and Computer Science 265 Computer Organization. Recommended: Computer Science 155 Fundamentals of Computing II. Four credits.

- Textbook: Will be provided on-line.

5.2 Instructor

- Instructor Name: Paul Vincent Craven
- Instructor Office Hours:
  - 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.
  - I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.
- Instructor Contact Information:
  - E-mail: paul.craven@simpson.edu
  - Office: Carver 333 (Second floor, Carver Science Building)
  - Phone: 515-961-1834
5.3 Schedule

Class meets Tuesday/Thursday from 9:40 am until 11:20 am.

5.3.1 Academic Calendar

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classes Begin</td>
<td>Jan-14</td>
</tr>
<tr>
<td>Last Day to Add/Drop</td>
<td>Jan-18</td>
</tr>
<tr>
<td>MLK day. Altered schedule</td>
<td>Jan-21</td>
</tr>
<tr>
<td>Mid-Term Date</td>
<td>Mar-06</td>
</tr>
<tr>
<td>Mid-Term Grades Due</td>
<td>Feb-28</td>
</tr>
<tr>
<td>Spring Break</td>
<td>Mar 9-17</td>
</tr>
<tr>
<td>Last Day to Withdraw</td>
<td>Mar-27</td>
</tr>
<tr>
<td>Campus Day</td>
<td>Apr-03</td>
</tr>
<tr>
<td>Easter Recess</td>
<td>Apr-22</td>
</tr>
<tr>
<td>Honors Convocation Ceremony</td>
<td>Apr-24</td>
</tr>
<tr>
<td>Research Symposium (No Class)</td>
<td>Apr-25</td>
</tr>
<tr>
<td>Last Day of Class</td>
<td>Apr-26</td>
</tr>
<tr>
<td>College Reading Day</td>
<td>Apr-29</td>
</tr>
<tr>
<td>Spring Final Exam Week</td>
<td>Apr-30 to May-02</td>
</tr>
<tr>
<td>Commencement</td>
<td>May-04</td>
</tr>
<tr>
<td>All Spring Grades Due</td>
<td>May-07</td>
</tr>
</tbody>
</table>

5.4 Student Assessment

5.4.1 Assignment Submission

- Assignments must be submitted on-line via Simpson’s Scholar website.
- Assignments are not accepted via e-mail.
- Source code will be checked into GitHub.
  - This will require a free account on GitHub.
- A live web server must be maintained using Amazon Web Services.
  - This will require an AWS account linked to a credit card. AWS offers one year of very basic level service free. If you are past that year there will be a nominal charge.
  - Make sure you shut down your servers at the end of class so you don’t keep getting charged.
  - See the instructor if you are not able set up your own server.

5.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.
Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high.

- Scholar will not show your attendance penalty, if that applies.
- If there is a missing grade that hasn’t been set at zero, then Scholar will not show that in the average. For example, if there are 10 assignments, each worth 100 points, but one is missing, Scholar will show your average as 100 instead of 90. I do try to go back and enter zero on missing assignments so Scholar shows the correct grade, but sometimes that isn’t practical.
- I’ve had a few semesters where the average score presented by Scholar is pure fiction, I’m not sure why.

If you want to calculate your grade, total up your points, divide by the total possible. Then take into account any attendance policy penalty. See the attendance policy.

### 5.4.3 Grading Scale

Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.

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<td>C</td>
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<td>D-</td>
</tr>
<tr>
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</table>

### 5.4.4 Late-Work/Make-up Work Policy

- All work must be turned in on-time.
- Late work is not accepted, unless approved ahead of time by the instructor.
- All work must be turned in by the end of the time scheduled for the class final. No extensions beyond this date/time are given unless you have a form filled out and signed for an “incomplete.”
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- If you need to use the lab for doing work, make sure to understand when the lab is open. The McNeill lab is usually closed on Sunday nights, and assignments are due Monday morning. Not knowing when the lab is open is not accepted as an excuse.
- If you are asked to use git to turn in homework, make sure you understand how to merge code. It isn’t fun to have git reject your push when trying to finish it up the night before it is due.
5.4.5 Attendance/Participation Policy

A student may miss three classes unexcused without penalty. After three unexcused absences, a student’s final grade will be lowered 3% for each class missed, not including the original three. So missing five classes will be a 6% penalty on the final grade.

Excused absences are those approved by the Academic Dean, or by prior permission of the instructor. Absences for sporting event functions are normally run through Dean’s office. E-mail me that you will be gone so that I can check you off as excused.

Danger: To be counted as attending class, the student must be present when the instructor takes attendance. Continually showing up to class late can really hurt a student’s grade. If a student leaves class early without prior permission, he or she will be counted as absent.

5.4.6 Assignments

5.5 Course Assessment

5.5.1 Student Learning Outcomes for the Major

CIS Major SLO #1: Apply and manage computer systems to meet business objectives.

CIS Major SLO #2: Create and manage computer systems utilizing a variety of information technologies.

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http://simpson.edu/sexual-and-relationship-misconduct-policy/
6.1 Course Details

- Course title: CMSC Capstone
- Catalog course description: Students must work on either a significant research project, a significant software development project, or a development project as part of an internship. Prerequisite: Completion of at least one 300-level CmSc or CIS course, submission of a proposal, and senior standing. Four credits. Offered spring semesters.
- Course level student learning objectives (SLOs):
  - Course SLO #1 design, implement, and analyze computational algorithms.
  - Course SLO #2 design computer systems, implement algorithms as part of those systems, and create well-written and documented programs.
  - Course SLO #3 design, implement, and modify normalized database systems. Graduates will also be able to write software that uses a database.
  - Course SLO #4 demonstrate how the features of the hardware system support software organization and performance.
  - Course SLO #5 apply and manage computer systems to meet business objectives.
  - Course SLO #6 create and manage computer systems utilizing a variety of information technologies.
  - Course SLO #7 design, implement, and modify normalized database systems. Graduates will also know how to maintain and manage database systems.
- Textbook: None

6.2 Instructor

- Instructor Name: Paul Vincent Craven
• Instructor Office Hours:
  – 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.
  – I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.

• Instructor Contact Information:
  – E-mail: paul.craven@simpson.edu
  – Office: Carver 333 (Second floor, Carver Science Building)
  – Phone: 515-961-1834

6.3 Schedule

There is no formal meeting time for CMSC 385. Class is conducted on-line.

6.3.1 Academic Calendar

<table>
<thead>
<tr>
<th>Summer Semester 2017</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Day</td>
<td>May-30</td>
</tr>
<tr>
<td>Last Day of Class</td>
<td>Aug-17</td>
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6.4 Student Assessment

6.4.1 Assignment Submission

Assignments must be submitted on-line via Simpson’s Scholar website.

Assignments are not accepted via e-mail.

6.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.

**Danger:** Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high.

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6.4.3 Grading Scale

Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.

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6.4.5 Attendance/Participation Policy

6.4.6 Assignments

- Monday, Jun 04 at 8:00 am: Assignment 1 - Zukei Puzzle
- Monday, Jun 12 at 8:00 am: Assignment 2 - Node.js Report to Management
- Monday, Jun 19 at 8:00 am: Assignment 3 - Node.js Proof-of-Concept
- Monday, Jun 26 at 8:00 am: Assignment 4 - Node.js Tutorial/Technical Report
- Monday, Jul 03 at 8:00 am: Assignment 5 - Database Diagramming
- Monday, Jul 10 at 8:00 am: Assignment 6 - Cloud Services Part 1
- Monday, Jul 17 at 8:00 am: Assignment 7 - Cloud Services Part 2
- Monday, Jul 24 at 8:00 am: Assignment 8 - Data Structures 1
- Monday, Jul 31 at 8:00 am: Assignment 9 - Data Structures 2
• Monday, Aug 07 at 8:00 am: Assignment 10 - Final Project Draft
• Monday, Aug 14 at 8:00 am: Assignment 11 - Final Project

6.5 Course Assessment

6.5.1 Engaged Citizenship Grids

This course does not have any EC designations.

6.5.2 Student Learning Outcomes for the Major

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CMSC Major SLO #4: Demonstrate how the features of the hardware system support software organization and performance.

6.5.3 Contact Hours and Learning Time

• Assignments are designed to take approximately 8-15 hours to complete.
• The last is designed to take approximately 20 hours to complete.
• About one hour is expected to review assignments after they are graded.
• About 140 hours should be spent on this class.

6.6 Policies and Procedures

6.6.1 Course Continuity Plan

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6.6.6 Sexual and Relationship Misconduct

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of the college are expected to report knowledge of alleged sexual misconduct to the Title IX Coordinator. Therefore, if you reveal to me, in conversation, writing, class discussion, or in any other manner, that you have experienced sexual misconduct it is my obligation to share that information with the Title IX Coordinator on our campus. Please know that if this is a step that needs to be taken, I will do my best to involve you in that process so that you know what to expect as a result of the communication with the Title IX Coordinator. To learn more about the expectations the college has of you with respect to sexual misconduct, you can find the full policy here:

http://simpson.edu/sexual-and-relationship-misconduct-policy/
7.1 Course Details

- Course title: CIS Capstone
- Catalog course description: Students must work on either a significant research project, a significant software development project, or a development project as part of an internship. Prerequisite: Completion of at least one 300-level CmSc or CIS course, submission of a proposal, and senior standing. Four credits. Offered spring semesters.
- Course level student learning objectives (SLOs):
  - Course SLO #1 design, implement, and analyze computational algorithms.
  - Course SLO #2 design computer systems, implement algorithms as part of those systems, and create well-written and documented programs.
  - Course SLO #3 design, implement, and modify normalized database systems. Graduates will also be able to write software that uses a database.
  - Course SLO #4 demonstrate how the features of the hardware system support software organization and performance.
  - Course SLO #5 apply and manage computer systems to meet business objectives.
  - Course SLO #6 create and manage computer systems utilizing a variety of information technologies.
  - Course SLO #7 design, implement, and modify normalized database systems. Graduates will also know how to maintain and manage database systems.
- Textbook: None

7.2 Instructor

- Instructor Name: Paul Vincent Craven
• Instructor Office Hours:
  – 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.
  – I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.

• Instructor Contact Information:
  – E-mail: paul.craven@simpson.edu
  – Office: Carver 333 (Second floor, Carver Science Building)
  – Phone: 515-961-1834

7.3 Schedule

There is no formal meeting time for CIS 385. Class is conducted on-line.

7.3.1 Academic Calendar

<table>
<thead>
<tr>
<th>Summer Semester 2017</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Day</td>
<td>May-30</td>
</tr>
<tr>
<td>Last Day of Class</td>
<td>Aug-17</td>
</tr>
</tbody>
</table>

7.4 Student Assessment

7.4.1 Assignment Submission

Assignments must be submitted on-line via Simpson’s Scholar website.
Assignments are not accepted via e-mail.

7.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.

Danger: Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high.

• Scholar will not show your attendance penalty, if that applies.
• If there is a missing grade that hasn’t been set at zero, then Scholar will not show that in the average. For example, if there are 10 assignments, each worth 100 points, but one is missing, Scholar will show your average as 100 instead of 90. I do try to go back and enter zero on missing assignments so Scholar shows the correct grade, but sometimes that isn’t practical.
• I’ve had a few semesters where the average score presented by Scholar is pure fiction, I’m not sure why.

If you want to calculate your grade, total up your points, divide by the total possible. Then take into account any attendance policy penalty. See the attendance policy.
7.4.3 Grading Scale

Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.

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<thead>
<tr>
<th>Percent</th>
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<tbody>
<tr>
<td>100-93%</td>
<td>A</td>
</tr>
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<td>92-90%</td>
<td>A-</td>
</tr>
<tr>
<td>89-87%</td>
<td>B+</td>
</tr>
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<td>C+</td>
</tr>
<tr>
<td>76-73%</td>
<td>C</td>
</tr>
<tr>
<td>72-70%</td>
<td>C-</td>
</tr>
<tr>
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<td>D+</td>
</tr>
<tr>
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<tr>
<td>62-60%</td>
<td>D-</td>
</tr>
<tr>
<td>59-0%</td>
<td>F</td>
</tr>
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</table>

7.4.4 Late-Work/Make-up Work Policy

- All work must be turned in on-time.
- Late work is not accepted, unless approved ahead of time by the instructor.
- All work must be turned in by the end of the time scheduled for the class final. No extensions beyond this date/time are given unless you have a form filled out and signed for an “incomplete.”
- Extra-credit / make up work is not offered.
- If you need to use the lab for doing work, make sure to understand when the lab is open. The McNeill lab is usually closed on Sunday nights, and assignments are due Monday morning. Not knowing when the lab is open is not accepted as an excuse.
- If you are asked to use git to turn in homework, make sure you understand how to merge code. It isn’t fun to have git reject your push when trying to finish it up the night before it is due.

7.4.5 Attendance/Participation Policy

7.4.6 Assignments

- Monday, Jun 04 at 8:00 am: Assignment 1 - Zukei Puzzle
- Monday, Jun 12 at 8:00 am: Assignment 2 - Node.js Report to Management
- Monday, Jun 19 at 8:00 am: Assignment 3 - Node.js Proof-of-Concept
- Monday, Jun 26 at 8:00 am: Assignment 4 - Node.js Tutorial/Technical Report
- Monday, Jul 03 at 8:00 am: Assignment 5 - Database Diagramming
- Monday, Jul 10 at 8:00 am: Assignment 6 - Cloud Services Part 1
- Monday, Jul 17 at 8:00 am: Assignment 7 - Cloud Services Part 2
- Monday, Jul 24 at 8:00 am: Assignment 8 - Data Structures 1
- Monday, Jul 31 at 8:00 am: Assignment 9 - Data Structures 2
• Monday, Aug 07 at 8:00 am: Assignment 10 - Final Project Draft
• Monday, Aug 14 at 8:00 am: Assignment 11 - Final Project

7.5 Course Assessment

7.5.1 Engaged Citizenship Grids

This course does not have any EC designations.

7.5.2 Student Learning Outcomes for the Major

CIS Major SLO #1: Apply and manage computer systems to meet business objectives.

CIS Major SLO #2: Create and manage computer systems utilizing a variety of information technologies.

CIS Major SLO #3: Design, implement, and modify normalized database systems. Graduates will also know how to maintain and manage database systems.

7.5.3 Contact Hours and Learning Time

• Assignments are designed to take approximately 8-15 hours to complete.
• The last is designed to take approximately 20 hours to complete.
• About one hour is expected to review assignments after they are graded.
• About 140 hours should be spent on this class.

7.6 Policies and Procedures

7.6.1 Course Continuity Plan

Should the normal instructional activity on the campus be shortened or interrupted by a campus-wide closing, students will receive information from the instructor or other representative of the college about when and if the course might be continued or completed via Internet, telephone, or United States mail.

7.6.2 Academic Integrity

Simpson’s Statement: In all endeavors, Simpson College expects its students to adhere to the strictest standards of honesty and integrity. In keeping with the College’s mission to develop the student’s critical intellectual skills, while fostering personal integrity and moral responsibility, each student is expected to abide by the Simpson College rules for academic integrity. Academic dishonesty includes (but is not limited to) any form of cheating, plagiarism, unauthorized collaboration, misreporting any absence as college-sponsored or college-sanctioned, submitting a paper written in whole or in part by someone else, or submitting a paper that was previously submitted in whole or in substantial part for another class without prior permission. If the student has any questions about whether any action would constitute academic dishonesty, it is imperative that he or she consult the instructor before taking the action. All cases of substantiated academic dishonesty must be reported to the student’s academic advisor and the Dean for Academic Affairs. For further guidance on these rules and their sanctions, please see the college catalog.
My addition: Students are strongly encouraged to work with one another on homework; however, blatant copying of assignments will be considered cheating.

If I get two assignments that are the same thing, both people will get zeros. Guard your homework carefully, so it is not used as a source for cheating. Don’t e-mail it to a friend so they can ‘use it to learn’ or ‘as a template’. Don’t allow someone to simply read off what you have on your computer screen. By allowing someone to cheat, that will allow the person to get behind in what they understand, and they will never catch up.

A student caught cheating will either get a zero for the assignment, have his/her over-all letter grade reduced, or be flunked from the course. Cheating students may be required to do extra work.

The instructor keeps a database of prior assignments and assignments commonly found on the Internet. The instructor will periodically run scans to look for duplicate assignments. We catch students cheating every single year. Don’t do it.

Regardless, cheating is like paying for a gym membership, and then sending someone else to work out for you. It doesn’t make sense. You aren’t going to get stronger that way.

7.6.3 Inclusive Explanation Statement

In this course, each voice in the classroom has something of value to contribute. Please take care to respect the different experiences, beliefs, and values expressed by students and staff involved in this course. We support Simpson’s commitment to diversity, and welcome individuals of all ages, backgrounds, citizenships, disabilities, sex, education, ethnicities, family statuses, genders, gender identities, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences.

7.6.4 Accommodations for Students with Accessibility Needs

I want everyone in this class to be successful. If you have a physical, sensory, learning, or psychological disability that can interfere with your learning, I want you to receive the accommodations to which you are entitled by law. In order for me to do provide accommodations to a student, the student’s disability must be documented with the Student Accessibility Office. I cannot assist a student with accommodations that I don’t know are needed, so if you need something, please make sure that you either contact me or that you ask Simpson’s Student Accessibility Coordinator, to do so on your behalf. If you have any further questions on the policies and services for students with disabilities, please refer to the academic catalog or go to http://simpson.edu/academics/student-accessibility/

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http://simpson.edu/sexual-and-relationship-misconduct-policy/
8.1 Course Details

- Course title: CMSC Capstone
- Catalog course description: Students must work on either a significant research project, a significant software development project, or a development project as part of an internship. This is a one credit version of 385 for when a student is working on an internship or project in combination with another major that does not require an additional four credits of load. Prerequisite: Completion of at least one 300-level CmSc or CIS course, submission of a proposal, and senior standing. One credit. Offered every semester.
- Course level student learning objectives (SLOs):
  - Course SLO #1: Graduates with a B.A. in Computer Science will be able to design, implement, and analyze computational algorithms.
  - Course SLO #2: Graduates with a B.A. in Computer Science will be able to design computer systems, implement algorithms as part of those systems, and create well-written and documented programs.
  - Course SLO #3: Graduates with a B.A. in Computer Science will be able to design, implement, and modify normalized database systems. Graduates will also be able to write software that uses a database.
  - Course SLO #4: Graduates with a B.A. in Computer Science will be able to demonstrate how the features of the hardware system support software organization and performance.
- Textbook: None

8.2 Instructor

- Instructor Name: Paul Vincent Craven
- Instructor Office Hours:
  - 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.

CMSC 386 Capstone
– I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.

• Instructor Contact Information:
  – E-mail: paul.craven@simpson.edu
  – Office: Carver 333 (Second floor, Carver Science Building)
  – Phone: 515-961-1834

8.3 Schedule

There is no formal meeting time for CIS 386. Class is conducted on-line.

8.3.1 Academic Calendar

<table>
<thead>
<tr>
<th>Spring Semester 2018</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Day</td>
<td>Jan-08</td>
</tr>
<tr>
<td>Classes Begin</td>
<td>Jan-09</td>
</tr>
<tr>
<td>Last Day to Add/Drop</td>
<td>Jan-15</td>
</tr>
<tr>
<td>MLK day. Altered schedule</td>
<td>Jan-15</td>
</tr>
<tr>
<td>Mid-Term Date</td>
<td>Feb-23</td>
</tr>
<tr>
<td>Mid-Term Grades Due</td>
<td>Feb-28</td>
</tr>
<tr>
<td>Spring Break</td>
<td>Mar-3-11</td>
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<tr>
<td>Last Day to Withdraw</td>
<td>Mar-22</td>
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<tr>
<td>Easter Recess</td>
<td>Apr-02</td>
</tr>
<tr>
<td>Campus Day (No Class)</td>
<td>Apr-04</td>
</tr>
<tr>
<td>Honors Convocation Ceremony</td>
<td>Apr-18</td>
</tr>
<tr>
<td>Research Symposium (No Class)</td>
<td>Apr-19</td>
</tr>
<tr>
<td>Last Day of Class</td>
<td>Apr-20</td>
</tr>
<tr>
<td>College Reading Day</td>
<td>Apr-23</td>
</tr>
<tr>
<td>Spring Final Exam Week</td>
<td>Apr 24-26</td>
</tr>
<tr>
<td>Commencement</td>
<td>Apr-28</td>
</tr>
<tr>
<td>All Spring Grades Due</td>
<td>May-01</td>
</tr>
</tbody>
</table>

8.4 Student Assessment

8.4.1 Assignment Submission

Assignments must be submitted on-line via Simpson’s Scholar website.

Assignments are not accepted via e-mail.

8.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.
Danger: Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high.

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If you want to calculate your grade, total up your points, divide by the total possible. Then take into account any attendance policy penalty. See the attendance policy.

### 8.4.3 Grading Scale

Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.

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<tr>
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<td>F</td>
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### 8.4.4 Late-Work/Make-up Work Policy

- All work must be turned in on-time.
- Late work is not accepted, unless approved ahead of time by the instructor.
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8.4.5 Attendance/Participation Policy

8.4.6 Assignments

- Monday, 1/15 at 8 am: Report 1
- Monday, 1/22 at 8 am: Report 2
- Monday, 1/29 at 8 am: Report 3
- Monday, 2/5 at 8 am: Report 4
- Monday, 2/12 at 8 am: Report 5
- Monday, 2/19 at 8 am: Report 6
- Monday, 2/26 at 8 am: Report 7
- Monday, 3/5 at 8 am: Report 8
- Spring Break
- Monday, 3/19 at 8 am: Report 9
- Monday, 3/26 at 8 am: Report 10
- Monday, 4/2 at 8 am: Report 11
- Monday, 4/9 at 8 am: Report 12
- Monday, 4/16 at 8 am: Report 13
- Monday, 4/23 at 8 am: Report 14 - Final Report

8.5 Course Assessment

8.5.1 Engaged Citizenship Grids

This course does not have any ECC designations.

8.5.2 Student Learning Outcomes for the Major

CMSC Major SLO #1: Design, implement, and analyze computational algorithms.

CMSC Major SLO #2: Design computer systems, implement algorithms as part of those systems, and create well-written and documented programs.

CMSC Major SLO #3: Design, implement, and modify normalized database systems. Graduates will also be able to write software that uses a database.

CMSC Major SLO #4: Demonstrate how the features of the hardware system support software organization and performance.

8.5.3 Contact Hours and Learning Time

When doing a capstone as a 386 class instead of a 385 class, students should be spending 10 or more hours per week with a supervisor performing work related to their degree. Another option is to work with a different professor and do 10 or more hours per week on related research.
The reports should take approximately 30 minutes to write each week. With 14 weeks in the course, the total number of hours involved should be approximately 146 hours.

8.6 Policies and Procedures

8.6.1 Course Continuity Plan

Should the normal instructional activity on the campus be shortened or interrupted by a campus-wide closing, students will receive information from the instructor or other representative of the college about when and if the course might be continued or completed via Internet, telephone, or United States mail.

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- Textbook: None

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- Instructor Name: Paul Vincent Craven
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9.3 Schedule

There is no formal meeting time for CIS 386. Class is conducted on-line.

9.3.1 Academic Calendar

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<tr>
<td>First Day</td>
<td>May-28</td>
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9.4 Student Assessment

9.4.1 Assignment Submission

Assignments must be submitted on-line via Simpson’s Scholar website.

Assignments are not accepted via e-mail.

9.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.

**Danger:** Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high.

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- I’ve had a few semesters where the average score presented by Scholar is pure fiction, I’m not sure why.

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9.4.3 Grading Scale

Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.
### 9.4.4 Late-Work/Make-up Work Policy

- All work must be turned in on-time.
- Late work is not accepted, unless approved ahead of time by the instructor.
- All work must be turned in by the end of the time scheduled for the class final. No extensions beyond this date/time are given unless you have a form filled out and signed for an “incomplete.”
- Extra-credit / make up work is not offered.
- If you need to use the lab for doing work, make sure to understand when the lab is open. The McNeill lab is usually closed on Sunday nights, and assignments are due Monday morning. Not knowing when the lab is open is not accepted as an excuse.
- If you are asked to use `git` to turn in homework, make sure you understand how to merge code. It isn’t fun to have `git` reject your push when trying to finish it up the night before it is due.

### 9.4.5 Attendance/Participation Policy

### 9.4.6 Assignments

- Tuesday, 9/4 at 8 am: Report 1
- Monday, 9/10 at 8 am: Report 2
- Monday, 9/17 at 8 am: Report 3
- Monday, 9/24 at 8 am: Report 4
- Monday, 9/12 at 8 am: Report 5
- Monday, 10/1 at 8 am: Report 6
- Monday, 10/8 at 8 am: Report 7
- Monday, 10/15 at 8 am: Report 8
- Monday, 10/22 at 8 am: Report 9
- Monday, 10/29 at 8 am: Report 10
- Monday, 11/5 at 8 am: Report 11
- Monday, 11/12 at 8 am: Report 12

<table>
<thead>
<tr>
<th>Percent</th>
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<tbody>
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<td>D-</td>
</tr>
<tr>
<td>59-0%</td>
<td>F</td>
</tr>
</tbody>
</table>
• Monday, 11/19 at 8 am: Report 13
• Monday, 11/26 at 8 am: No report - Thanksgiving Break
• Monday, 12/3 at 8 am: Report 14 - Final Report

9.5 Course Assessment

9.5.1 Engaged Citizenship Grids

This course does not have any ECC designations.

9.5.2 Student Learning Outcomes for the Major

CIS Major SLO #1: Apply and manage computer systems to meet business objectives.

CIS Major SLO #2: Create and manage computer systems utilizing a variety of information technologies.

CIS Major SLO #3: Design, implement, and modify normalized database systems. Graduates will also know how to maintain and manage database systems.

9.5.3 Contact Hours and Learning Time

When doing a capstone as a 386 class instead of a 385 class, students should be spending 10 or more hours per week with a supervisor performing work related to their degree. Another option is to work with a different professor and do 10 or more hours per week on related research.

The reports should take approximately 30 minutes to write each week. With 14 weeks in the course, the total number of hours involved should be approximately 146 hours.

9.6 Policies and Procedures

9.6.1 Course Continuity Plan

Should the normal instructional activity on the campus be shortened or interrupted by a campus-wide closing, students will receive information from the instructor or other representative of the college about when and if the course might be continued or completed via Internet, telephone, or United States mail.

9.6.2 Academic Integrity

Simpson’s Statement: In all endeavors, Simpson College expects its students to adhere to the strictest standards of honesty and integrity. In keeping with the College’s mission to develop the student’s critical intellectual skills, while fostering personal integrity and moral responsibility, each student is expected to abide by the Simpson College rules for academic integrity. Academic dishonesty includes (but is not limited to) any form of cheating, plagiarism, unauthorized collaboration, misreporting any absence as college-sponsored or college-sanctioned, submitting a paper written in whole or in part by someone else, or submitting a paper that was previously submitted in whole or in substantial part for another class without prior permission. If the student has any questions about whether any action would constitute academic dishonesty, it is imperative that he or she consult the instructor before taking the action. All cases of substantiated academic dishonesty must be reported to the student’s academic advisor and the Dean for Academic Affairs. For further guidance on these rules and their sanctions, please see the college catalog.
My addition: Students are strongly encouraged to work with one another on homework; however, blatant copying of assignments will be considered cheating.

If I get two assignments that are the same thing, both people will get zeros. Guard your homework carefully, so it is not used as a source for cheating. Don’t e-mail it to a friend so they can ‘use it to learn’ or ‘as a template’. Don’t allow someone to simply read off what you have on your computer screen. By allowing someone to cheat, that will allow the person to get behind in what they understand, and they will never catch up.

A student caught cheating will either get a zero for the assignment, have his/her over-all letter grade reduced, or be flunked from the course. Cheating students may be required to do extra work.

The instructor keeps a database of prior assignments and assignments commonly found on the Internet. The instructor will periodically run scans to look for duplicate assignments. We catch students cheating every. single. year. Don’t do it.

Regardless, cheating is like paying for a gym membership, and then sending someone else to work out for you. It doesn’t make sense. You aren’t going to get stronger that way.

9.6.3 Inclusive Explanation Statement

In this course, each voice in the classroom has something of value to contribute. Please take care to respect the different experiences, beliefs, and values expressed by students and staff involved in this course. We support Simpson’s commitment to diversity, and welcome individuals of all ages, backgrounds, citizenships, disabilities, sex, education, ethnicities, family statuses, genders, gender identities, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences.

9.6.4 Accommodations for Students with Accessibility Needs

I want everyone in this class to be successful. If you have a physical, sensory, learning, or psychological disability that can interfere with your learning, I want you to receive the accommodations to which you are entitled by law. In order for me to do provide accommodations to a student, the student’s disability must be documented with the Student Accessibility Office. I cannot assist a student with accommodations that I don’t know are needed, so if you need something, please make sure that you either contact me or that you ask Simpson’s Student Accessibility Coordinator, to do so on your behalf. If you have any further questions on the policies and services for students with disabilities, please refer to the academic catalog or go to http://simpson.edu/academics/student-accessibility/

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9.6.6 Sexual and Relationship Misconduct

Simpson College strives to create an environment free from sexual or relationship misconduct of any kind; and in which those who have experienced sexual misconduct get the help and support they need. Simpson’s Sexual and Relationship Misconduct Policy outlines expectations the college has students and employees, including faculty. In order to do all that we can to maintain a safe campus community, and in compliance with Federal law, all employees of the college are expected to report knowledge of alleged sexual misconduct to the Title IX Coordinator. Therefore, if you reveal to me, in conversation, writing, class discussion, or in any other manner, that you have experienced sexual
misconduct it is my obligation to share that information with the Title IX Coordinator on our campus. Please know that if this is a step that needs to be taken, I will do my best to involve you in that process so that you know what to expect as a result of the communication with the Title IX Coordinator. To learn more about the expectations the college has of you with respect to sexual misconduct, you can find the full policy here:

http://simpson.edu/sexual-and-relationship-misconduct-policy/
10.1 Course Details

• Course title: CMSC 390IA Information Assurance
• Catalog course description:
  Information assurance is the practice of managing information-related risks. More specifically, students in this class will learn to protect and defend information and information systems by ensuring confidentiality, integrity, authentication, availability, and non-repudiation of data.
• Course level student learning objectives (SLOs):
  – Understand the need, terminology, and drivers behind information security
  – Access control
  – Security operations and administration
  – Auditing, testing and monitoring
  – Planning a response and recovery
  – Cryptography
  – Networking
  – Malicious code
  – Government policy
  – Hands-on labs with popular security tools

10.2 Instructor

• Instructor Name: Paul Vincent Craven
• Instructor Office Hours:
  – 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.
  – I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.

• Instructor Contact Information:
  – E-mail: paul.craven@simpson.edu
  – Office: Carver 333 (Second floor, Carver Science Building)
  – Phone: 515-961-1834

10.3 Schedule

Class meets Tuesday/Thursday from 8:00 am until 9:30 am.

10.3.1 Academic Calendar

<table>
<thead>
<tr>
<th>Spring Semester 2018</th>
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10.4 Student Assessment

10.4.1 Assignment Submission

Assignments must be submitted on-line via Simpson’s Scholar website.

Assignments are not accepted via e-mail.
10.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.

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If you want to calculate your grade, total up your points, divide by the total possible. Then take into account any attendance policy penalty. See the attendance policy.

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Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.

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### 10.4.5 Attendance/Participation Policy

A student may miss three classes unexcused without penalty. After three unexcused absences, a student’s final grade will be lowered 3% for each class missed, not including the original three. So missing five classes will be a 6% penalty on the final grade.

Excused absences are those approved by the Academic Dean, or by prior permission of the instructor. Absences for sporting event functions are normally run through Dean’s office. E-mail me that you will be gone so that I can check you off as excused.

**Danger:** To be counted as attending class, the student must be present when the instructor takes attendance. Continually showing up to class late can really hurt a student’s grade. If a student leaves class early without prior permission, he or she will be counted as absent.

### 10.4.6 Assignments

We will be following the textbook for assignments. There will be:

- For each chapter there will be an on-line quiz. Each quiz will be scaled to 10 points.
- For each lab, there will be a lab report worth 10 points. Lab reports are done with a lab partner most of the time. If your one partner does not show up on the day we work on the lab, then the work will need to be done and turned in separately.
- For each lab, there will be an on-line lab assessment worth 10 points. Each person must complete the quiz separately.

What we will have for a final, and the number of points for the final, is yet to be determined.

### 10.5 Course Assessment

**CMSC Major SLO #2:** Design computer systems, implement algorithms as part of those systems, and create well-written and documented programs.

#### 10.5.1 Contact Hours and Learning Time

CMSC 390IA meets two times per week. Class covers 14 weeks, with one week of break, and one day off for Honor Symposium giving us a total of 25 classes. At 90 minutes per class, that’s 37.5 hours of meeting time.

There are a total of 11 chapters to be read, and quizzes to cover them. Each chapter should take approximately two hours to read, and two hours to do the quiz. This totals 44 hours.

There are 10 labs, 10 lab reports, and 10 lab quizzes. Each lab, report, and quiz should take about 6 hours of work. This should total about 60 hours.

Total time spent on the class should be about 140 hours, or about 10 hours per week.
10.6 Policies and Procedures

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11.1 Course Details

- Course title: CIS 390AG Advanced Game Design
- Catalog course description:
  Students in Advanced Game Design work in teams to create their own game using the Unity Game Engine. Students will work with C#, JavaScript, 3-D modeling, version control, physics engines, and manage the development schedule with project management skills.
- Course level student learning objectives (SLOs):
  - Improve C# and JavaScript coding skills
  - Improve 3D modeling skills
  - Learn to work with a current, professional game engine. Including working with game physics
  - Work in a team environment using standard project management and code management skills
- Textbook: There is no textbook for the class. We will be utilizing many of Unity’s on-line resources. We will also be mostly following its recommended class curriculum.

11.2 Instructor

- Instructor Name: Paul Vincent Craven
- Instructor Office Hours:
  - 2:00 pm - 3:00 pm Monday, Tuesday, Wednesday, and Friday.
  - I am often in my office outside of office hours. Feel free to stop by. If you can’t make the office hours, also feel free to make an appointment.
- Instructor Contact Information:
11.3 Schedule

Class meets Monday/Wednesday/Friday from 2:10 pm until 3:10 pm.

11.3.1 Academic Calendar

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11.4 Student Assessment

11.4.1 Assignment Submission

Assignments must be submitted on-line via Simpson’s Scholar website.

Assignments are not accepted via e-mail.

11.4.2 Grading

Grades will be calculated on a percent scale. The percentage is calculated by total points earned, divided by total points possible. If there is an attendance penalty, then that is subtracted next.

**Danger:** Sometimes Simpson’s Scholar site shows the wrong grade. If it does this, it will show your total class score to be too high.

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• If there is a missing grade that hasn’t been set at zero, then Scholar will not show that in the average. For example, if there are 10 assignments, each worth 100 points, but one is missing, Scholar will show your average as 100 instead of 90. I do try to go back and enter zero on missing assignments so Scholar shows the correct grade, but sometimes that isn’t practical.

• I’ve had a few semesters where the average score presented by Scholar is pure fiction, I’m not sure why.

If you want to calculate your grade, total up your points, divide by the total possible. Then take into account any attendance policy penalty. See the attendance policy.

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Grades are not rounded. For example, 92.99% is considered an A-, and 93.00% is an A.

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### 11.4.4 Late-Work/Make-up Work Policy

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• Late work is not accepted, unless approved ahead of time by the instructor.

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• If you need to use the lab for doing work, make sure to understand when the lab is open. The McNeill lab is usually closed on Sunday nights, and assignments are due Monday morning. Not knowing when the lab is open is not accepted as an excuse.

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Excused absences are those approved by the Academic Dean, or by prior permission of the instructor. Absences for sporting event functions are normally run through Dean’s office. E-mail me that you will be gone so that I can check you off as excused.
11.4.6 Assignments

We will work through part of the course with approximately half of the assignments being written, and half technical. Most assignments will come form the Unity curriculum. Next, there will be a final capstone project.

11.5 Course Assessment

11.5.1 Student Learning Outcomes for the Major

CIS Major SLO #1: Apply and manage computer systems to meet business objectives.

CIS Major SLO #2: Create and manage computer systems utilizing a variety of information technologies.

11.5.2 Contact Hours and Learning Time

CMSC 390AG meets three times per week. Class covers 14 weeks, with one week of break, and one day off for Honor Symposium giving us a total of 39 classes. At 60 minutes per class, that’s 39 hours of meeting time.

There will be approximately 3 hours of Unity tutorial videos assigned per week. Because of pausing/rewinding this should take about 6 hours per week for a total of 78 hours.

Total time outside of class spent on projects, including the final capstone project, should be about 33 hours.

Total time spent on the class should be about 140 hours, or about 10 hours per week.

11.6 Policies and Procedures

11.6.1 Course Continuity Plan

Should the normal instructional activity on the campus be shortened or interrupted by a campus-wide closing, students will receive information from the instructor or other representative of the college about when and if the course might be continued or completed via Internet, telephone, or United States mail.

11.6.2 Academic Integrity

Simpson’s Statement: In all endeavors, Simpson College expects its students to adhere to the strictest standards of honesty and integrity. In keeping with the College’s mission to develop the student’s critical intellectual skills, while fostering personal integrity and moral responsibility, each student is expected to abide by the Simpson College rules for academic integrity. Academic dishonesty includes (but is not limited to) any form of cheating, plagiarism, unauthorized collaboration, misreporting any absence as college-sponsored or college-sanctioned, submitting a paper written in whole or in part by someone else, or submitting a paper that was previously submitted in whole or in substantial part for another class without prior permission. If the student has any questions about whether any action would constitute academic dishonesty, it is imperative that he or she consult the instructor before taking the action. All
cases of substantiated academic dishonesty must be reported to the student’s academic advisor and the Dean for Academic Affairs. For further guidance on these rules and their sanctions, please see the college catalog.

**My addition:** Students are strongly encouraged to work with one another on homework; however, blatant copying of assignments will be considered cheating.

If I get two assignments that are the same thing, both people will get zeros. Guard your homework carefully, so it is not used as a source for cheating. Don’t e-mail it to a friend so they can ‘use it to learn’ or ‘as a template’. Don’t allow someone to simply read off what you have on your computer screen. By allowing someone to cheat, that will allow the person to get behind in what they understand, and they will never catch up.

A student caught cheating will either get a zero for the assignment, have his/her over-all letter grade reduced, or be flunked from the course. Cheating students may be required to do extra work.

The instructor keeps a database of prior assignments and assignments commonly found on the Internet. The instructor will periodically run scans to look for duplicate assignments. We catch students cheating every single year. Don’t do it.

Regardless, cheating is like paying for a gym membership, and then sending someone else to work out for you. It doesn’t make sense. You aren’t going to get stronger that way.

### 11.6.3 Accommodations for Students with Accessibility Needs

I want everyone in this class to be successful. If you have a physical, sensory, learning, or psychological disability that can interfere with your learning, I want you to receive the accommodations to which you are entitled by law. In order for me to do provide accommodations to a student, the student’s disability must be documented with the Student Accessibility Office. I cannot assist a student with accommodations that I don’t know are needed, so if you need something, please make sure that you either contact me or that you ask Simpson’s Student Accessibility Coordinator, to do so on your behalf. If you have any further questions on the policies and services for students with disabilities, please refer to the academic catalog or go to [http://simpson.edu/academics/student-accessibility/](http://simpson.edu/academics/student-accessibility/)

### 11.6.4 Inclusive Explanation Statement

In this course, each voice in the classroom has something of value to contribute. Please take care to respect the different experiences, beliefs, and values expressed by students and staff involved in this course. We support Simpson’s commitment to diversity, and welcome individuals of all ages, backgrounds, citizenships, disabilities, sex, education, ethnicities, family statuses, genders, gender identities, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences.

### 11.6.5 Sexual and Relationship Misconduct

Simpson College strives to create an environment free from sexual or relationship misconduct of any kind; and in which those who have experienced sexual misconduct get the help and support they need. Simpson’s Sexual and Relationship Misconduct Policy outlines expectations the college has students and employees, including faculty. In order to do all that we can to maintain a safe campus community, and in compliance with Federal law, all employees of the college are expected to report knowledge of alleged sexual misconduct to the Title IX Coordinator. Therefore, if you reveal to me, in conversation, writing, class discussion, or in any other manner, that you have experienced sexual misconduct it is my obligation to share that information with the Title IX Coordinator on our campus. Please know that if this is a step that needs to be taken, I will do my best to involve you in that process so that you know what to expect as a result of the communication with the Title IX Coordinator. To learn more about the expectations the college has of you with respect to sexual misconduct, you can find the full policy here: