

**Point Loma Nazarene University**  
**Senior Seminar (CSC481/ISS481/MTH481) Spring 2019 (1 unit)**  
**Mathematical, Information and Computer Sciences**

**Time and Place:** Mondays 4:05-5:15 Latter Hall 2

**Instructor:** Greg Crow, Ph.D.

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**Office Number:** RS 252 / Trailer #1

**Office Hours:** Posted in Canvas

You can come by my office any time and if I am free I will help you. You can also email me to set a time for an appointment. If you have a question or just want to hang out, come by my office or send me email.

**Texts:**

There are no text books for this class. There will be readings uploaded in Canvas as well as reading for the specific topic that you will be using for your final report.

**Content:**

This one-unit capstone course is a seminar in which students give lectures on topics of general interest in computer science, information systems and mathematics. Issues related to vocation are discussed. Prerequisite: Senior standing or Junior standing if a December graduate

**Learning Outcomes:**

This class is a capstone course for our majors. The learning outcomes are:

- Students will be able to apply their technical knowledge to solve problems.
- Students will be able to speak about their work with precision, clarity and organization.
- Students will be able to write about their work with precision, clarity and organization.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Students will be able to gather relevant information, examine information and form a conclusion based on that information.
- Students will be able to understand and create arguments supported by quantitative evidence, and they can clearly communicate those arguments in a variety of formats.

**Grading:**

This class is graded pass/fail as determined by requirements described in this syllabus and on the class schedule. You will have a number of intermediate assignments that you must complete and turn in via Canvas. **Note that there are five ways to fail: lack of participation (e.g. missing more than one class, not turning in vocation reflections or texting/doing email during class), missing the ETS exam, missing the mock interview, missing the GE exam, getting a poor grade on Oral or Written presentation.**

You will not get credit for an item unless it appears to them that the expected amount of time, as defined below, has been spent on each item

In-depth reading / outline prep	10 hours
1 <sup>st</sup> paper draft	5 hours
PowerPoint draft	4 hours
Paper/PPT revisions	6 hours

For each day that an assignment is late, **one page will be added to the length of the written report.** For example, if the paper outline is 2 days late, and the PowerPoint draft is 1 day late, you will have to write 3 extra pages.

The rubrics use a 1-4 grading scale with 4 being a high score. You will not pass if you receive an average of less than 2.5 on either your written report or your oral report. You can see the rubrics at the end of this document.

**General Education Exam:**

As per the assessment requirements of the school, a GE exam will be administered in an effort to determine how well our GE classes have met PLNUs objectives. The date is February 25<sup>th</sup>. Should you be absent on this date, you will have to take the exam at another time. **Class will be from 4:00-5:30 on that day.**

**ETS Exam:**

The two hour ETS field exam will be given as a mid-term for the course. This exam covers a wide range of topics from your four years of course work. CS majors will take the CS exam, Math majors will take the Math exam and IS majors will take the Peregrin exam for IS. **Please note that the class will meet until 6:00 on April 15, the day of the exam.** If you do not take an exam, this is grounds for failing the class. Late exams may be taken only by prior arrangement or with a documented emergency. I must participate in the decision for you to miss the exam; this means that you need to phone me before missing the exam.

**Writing About Vocation:**

You will be given a weekly reading assignment from one of the two texts on vocation. Along with that reading you will be given a list of questions for reflection. Your responses to those comments are due at **11:00 p.m. on the Saturday night before the next class** (see schedule for the readings). Inadequate participation in written assignments could lead to a failing grade.

**Mock Interviews:**

Everyone in the class will be expected to schedule a mock interview and resume review through the Office of Strengths and Vocation (OSV). Details will be handed out in class.

### **Senior Seminar Written and Oral Report:**

Near the start of the semester you will work with a faculty member in your major to select a topic for giving a written (min 9 pages including abstract, bibliography, and table of contents) and an oral (10 minutes + 3 minutes for questions) report. This should be done using technology and terminology standard to your discipline. The reports will be scored by faculty using rubrics (which is attached to the end of this syllabus). Your topic must include things that you have learned outside of regular coursework.

You may report on your honors thesis, your service learning project, your internship, or a topic from your discipline that you want to learn more about. If the report is based on work done with a group, you must do your own unique presentation and report. The material must not overlap substantially with material presented by others in the class. It may be necessary to do additional work or to concentrate on different aspects of your project. Be sure to discuss this with your advisor before working on your report or presentation.

### **Written Report Instructions:**

You will be writing a paper of at least 9 pages in length (including abstract, bibliography, and table of contents). Please be sure to pay attention to all of the critical elements of a well written paper:

- Clear structure that includes an abstract, table of contents, clear sections, a summary/conclusion and a bibliography)
- A clear statement at the beginning of the paper about the main topic covered by the paper
- Carefully crafted language
- Good transitions between sections
- Appropriate grammar and spelling
- Do not use the first person in writing the paper, good scientific writing is always in the third person. Your paper should not read like a summer travel log.
- Careful use of references to support your points. Ideas should be attributed and references should be quoted or cited in the body of the paper as appropriate and there should be a link between the citation and the bibliography (pick one style and stick with it - MLA or APA is fine).
- You should not just report the ideas of others but should synthesize them to draw your own conclusions.

Before you turn in your paper, look at the Written Report rubrics and verify that you have covered all topics.

Note that your paper will be discussed in class with your advisor. You should make adjustments to your paper based on that input.

What to turn in: Your final paper and your self-assessment of your own work using the Written Report Rubrics should be turned in via Canvas.

### **Oral Presentation Instructions:**

You will give a 13 minute presentation on your topic in class (10 minutes of presentation and 3 minutes for questions). Here are some important things to keep in mind:

- You should focus on extracting the most relevant information from your paper for the presentation.
- 15 minutes is a much shorter period of time than you imagine, practice repeatedly and time yourself.
- Project your slides in a classroom and stand at the back of the room. Can you see all important graphics and figures? If not, make the text larger.
- Find ways to engage the class. Have them do an activity, answer a question, make a guess about an example, etc.
- You should not read your slides during the presentation. You should be familiar with the material and the order of the slides so that you can make eye contact with the class. Practice, practice, practice.
- While you are practicing, have someone record you using a phone or camera. When you look at yourself talking you will gain some insights about good and bad habits and can prepare your final talk accordingly.
- Empty your pockets.... One of the most annoying tics that people display when giving a talk is rattling keys, change, etc. in their pockets. Remove the temptation.

Be sure to take a look at the Oral Presentation Rubric before you give your presentation. The rubric will guide you in making sure that your slides are well prepared and that you are ready to talk to a group.

What to turn in: A final printed copy of your PowerPoint slides via Canvas.

### **Final Exam: Date and Time**

The final exam date and time is set by the university at the beginning of the semester and may not be changed by the instructor. Only in the case that a student is required to take three exams during the same day of finals week is an instructor authorized to change the exam date and time for that particular student. We will meet at the final exam time for a “summative experience.” The final is FRIDAY May 3<sup>rd</sup> from 4:30-7:00 PM. (the final involves dinner).

### **University Mission:**

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service is an expression of faith. Being of Wesleyan heritage, we strive to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

### **Department Mission:**

The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

### **Attendance:**

Attendance is expected at each class session. In the event of an absence you are responsible for the material covered in class and the assignments given that day.

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation. See [Attendance Policy](#) in the Undergraduate Academic Catalog.

**Class Enrollment:**

It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

**Academic Accommodations:**

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center. ([DRC@pointloma.edu](mailto:DRC@pointloma.edu) or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

**Academic Honesty:**

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course. Faculty should follow and students may appeal using the procedure in the university Catalog. See [the catalog](#) for definitions of kinds of academic dishonesty and for further policy information.

**Copyright Protected Materials:**

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

**Credit Hour:**

In the interest of providing sufficient time to accomplish the stated course learning outcomes, this class meets the PLNU credit hour policy for a 1-unit class delivered over 15 weeks. Specific details about how the class meets the credit hour requirements can be provided upon request.

<b>Week</b>	<b>Monday – Topic and assignment due</b>	<b>Saturday – Assignments Due</b>
1	Jan 8 (Tuesday) Orientation	Jan 12 Syllabus Quiz Report Topic + Advisor suggestions
2	Jan 14 Resume Discussion Student introductions	Jan 19 Reflections on first Vocation reading Resume draft Cover Letter draft
3	Jan 21 MLK Day	Jan 26 Reflections from second Vocation reading
4	Jan 28 Vocation Discussion Peer review of resume/cover letter Sign up for Mock Interviews	Feb 2 Reflections on third Vocation reading Outline for final report draft #1
5	<b>Feb 4</b> Vocation Discussion Faculty Advisors: Resume review and written report outline review	Feb 9 Reflections on fourth Vocation reading Final Resume Final Cover Letter Outline for final report draft #2
6	Feb 11 Vocation Discussion Peer Review of Written Report Outline Presentation dates determined	Feb 16 Reflections on fifth Vocation reading Final Outline for final report due
7	Feb 18 Mock interviews with OSV	Feb 23 No vocation reading this week. Reflection on Mock interview
8	Feb 25 <b>GE Test</b> <b>Class from 4:00-5:30 PM</b>	Mar 2 Spring Break
9	Mar 4 Spring Break – no class	Mar 9 Reflections on sixth Vocation reading Written Report draft #1 due Power Point draft #1 due
10	<b>Mar 11</b> Vocation Discussion Faculty Advisors: Written report and PPT draft review	Mar 16 Reflections on seventh Vocation reading Written Report draft #2 due PowerPoint draft #2 due
11	Mar 18 Vocation Discussion 4 Students Present	Mar 23 No vocation reading this week.
12	March 25 4 Students Present	Mar 30 No reading this week Final Written Report Due Self-Evaluation with Written Presentation Rubric
13	Apr 1 Vocation Discussion 4 Students Present	Apr 6 Reflections from eighth Vocation reading
14	Apr 8 4 Students Present	Apr 13 No vocation reading this week.
15	Apr 15 <b>ETS Exam</b> <b>Class from 4:00-6:00 tonight with pizza</b>	Apr 20 No vocation reading this week.
16	<b>April 22</b> <b>NO CLASS - Easter</b>	Apr 27 Final Vocation Questions Final PowerPoint due
17	Final Exam: Friday May 3 4:30-7:00 4 Students Present Class Dinner	

### Written Report Rubric

Criteria	Outstanding	High Satisfactory	Low Satisfactory	Unsatisfactory
Bibliography and supporting documents	<input type="checkbox"/> Multiple references from distinct reputable sources  <input type="checkbox"/> References cited in the body of the document	<input type="checkbox"/> Most references from distinct reputable sources  <input type="checkbox"/> Some citation of references in the body of the document	<input type="checkbox"/> Some references from reputable sources  <input type="checkbox"/> Limited citation of references in the body of the document	<input type="checkbox"/> No bibliography or all references from untrusted sites on the internet  <input type="checkbox"/> No citation of references in the body of the document
Organization	<input type="checkbox"/> Conveys a central theme with all ideas connected, arrangement of ideas clearly related to topic  <input type="checkbox"/> Clear introduction, body (with sections), and conclusion includes summary and closure  <input type="checkbox"/> Includes both an abstract and table of contents	<input type="checkbox"/> Conveys a central idea or topic with some ideas connected to the topic  <input type="checkbox"/> Includes introduction, body and conclusion  <input type="checkbox"/> Includes abstract and table of contents (one partial and one complete)	<input type="checkbox"/> Attempts to focus on an idea or topic with many ideas not connected to the topic  <input type="checkbox"/> Introduction, body, conclusion detectable but not clear  <input type="checkbox"/> Includes partial abstract and partial table of contents	<input type="checkbox"/> Has little or no focus on central idea or topic  <input type="checkbox"/> Introduction, body or conclusion absent  <input type="checkbox"/> No abstract or table of contents
Grammar and spelling	<input type="checkbox"/> No use of first- person tense  <input type="checkbox"/> No grammatical or spelling errors	<input type="checkbox"/> Few uses of the first-person tense  <input type="checkbox"/> Few grammatical and spelling errors	<input type="checkbox"/> Several uses of the first- person tense  <input type="checkbox"/> Some grammatical and spelling errors	<input type="checkbox"/> Written in first-person tense  <input type="checkbox"/> Many grammatical and spelling errors
Depth of information	<input type="checkbox"/> Appropriately synthesizes information from multiple distinct sources  <input type="checkbox"/> Draws conclusions and personal insights from synthesis  <input type="checkbox"/> Has the minimum number of pages including penalty pages; subject coverage is excellent	<input type="checkbox"/> Synthesis of information from at least three distinct sources  <input type="checkbox"/> At least two personal insights or conclusions stated  <input type="checkbox"/> Has the minimum number of pages including penalty pages; subject coverage is good	<input type="checkbox"/> Synthesis of information from at least two distinct sources  <input type="checkbox"/> At least one personal insight or conclusion stated  <input type="checkbox"/> Has the minimum number of pages including penalty pages; subject coverage is adequate	<input type="checkbox"/> Summary reporting of information without synthesis  <input type="checkbox"/> No personal insights  <input type="checkbox"/> Does not have the minimum number of pages including penalty pages
Clarity of writing	<input type="checkbox"/> Sentences flow  <input type="checkbox"/> Smooth transitions between paragraphs  <input type="checkbox"/> Any and all terms and acronyms are defined  <input type="checkbox"/> Provides evidence to support points	<input type="checkbox"/> Good sentence structure  <input type="checkbox"/> Adequate transitions between paragraphs  <input type="checkbox"/> Most terms and acronyms are defined  <input type="checkbox"/> Lacks support for some points	<input type="checkbox"/> Occasional poor sentence structure  <input type="checkbox"/> Transitions between paragraphs unclear  <input type="checkbox"/> Some terms and acronyms are defined  <input type="checkbox"/> Provides minimal support for points	<input type="checkbox"/> Frequent poor sentence structure  <input type="checkbox"/> Lacked transitions between paragraphs  <input type="checkbox"/> Many terms and acronyms are undefined  <input type="checkbox"/> Ideas not supported

**Oral Presentation Rubric Update (4/12/17)**

<b>Criteria</b>	<b>Outstanding</b>	<b>High Satisfactory</b>	<b>Low Satisfactory</b>	<b>Unsatisfactory</b>
Command of background material	<input type="checkbox"/> Clearly knows material and key facts by memory <input type="checkbox"/> Expands on PPT slides <input type="checkbox"/> Content appropriate for audience	<input type="checkbox"/> Clearly knows key facts with a few memory slips <input type="checkbox"/> Some expansion on PPT slides <input type="checkbox"/> Partial audience adaptation of content	<input type="checkbox"/> Reads some information; knows some facts from memory <input type="checkbox"/> No expansion of PPT slide content <input type="checkbox"/> Little audience adaptation of content	<input type="checkbox"/> Reads sentences from slides <input type="checkbox"/> Dependent on notes <input type="checkbox"/> Lacks audience adaptation of content
Organization	<input type="checkbox"/> Clear and concise outline <input type="checkbox"/> Relevant graphics and key text items on slides <input type="checkbox"/> Presentation is between 10-15 minutes	<input type="checkbox"/> Clear outline <input type="checkbox"/> Too much information on slides (not concise) <input type="checkbox"/> Presentation 1 minute outside of the range (10-15 minutes)	<input type="checkbox"/> Some sense of outline <input type="checkbox"/> Too much detailed information on slides <input type="checkbox"/> Presentation 2 minutes outside of the range (10-15 minutes)	<input type="checkbox"/> No clear outline <input type="checkbox"/> Slides are in paragraphed; too much detailed information on one slide <input type="checkbox"/> Presentation 3 minutes outside of the range (10-15 minutes)
Oral Presentation skills	<input type="checkbox"/> Clearly has practiced several times; smooth transitions <input type="checkbox"/> Engages audience in content multiple time and engagement is well connected to talk (questions, examples, etc) <input type="checkbox"/> Free of disfluencies (ah, umh) <input type="checkbox"/> Is clearly heard in the room and makes an uses inflection for emphasis <input type="checkbox"/> Engaged audience through eye contact <input type="checkbox"/> Engaged audience through gestures	<input type="checkbox"/> Has practiced but transitions are not smooth <input type="checkbox"/> Engages audience at least twice in content (questions, examples, etc.) <input type="checkbox"/> A few disfluencies (ah, umh, er) <input type="checkbox"/> Can be understood most of the time and uses some inflection <input type="checkbox"/> Some engagement of audience through eye contact <input type="checkbox"/> Some engagement of audience through gestures	<input type="checkbox"/> Has practiced presentation but cannot verbally make transitions between slides <input type="checkbox"/> Audience engagement at least once with content (questions, examples, etc.) <input type="checkbox"/> Many disfluencies (ah, umh, er) <input type="checkbox"/> Can sometimes be understood and uses little inflection <input type="checkbox"/> Infrequent eye contact <input type="checkbox"/> Distracting gestures or mannerisms	<input type="checkbox"/> Clearly did not practice presentation; Does not anticipate content of next slide <input type="checkbox"/> No audience involvement <input type="checkbox"/> Disfluencies (ah, umh, er) detract from presentation <input type="checkbox"/> Can not be heard and/or speaks in a monotone <input type="checkbox"/> Little audience awareness or eye contact <input type="checkbox"/> Frequent distracting gestures or mannerisms
Use of Presentation Tools	<input type="checkbox"/> PPT background is matched to content, legible font, seamless transitions <input type="checkbox"/> Graphics imbedded and matched to topic, necessary hyperlinks work	<input type="checkbox"/> Appropriate PPT slide backgrounds, transitions & font <input type="checkbox"/> Most graphics imbedded and matched to topic, most necessary hyperlinks work	<input type="checkbox"/> Distracting PPT slide backgrounds and transitions, font hard to read <input type="checkbox"/> Some inappropriate graphics or use of PPT embellishments, necessary hyperlinks don't work	<input type="checkbox"/> No attention given to PPT slide backgrounds and transitions, font illegible <input type="checkbox"/> Distracting use of embellishments, graphics not connected to topic
Ability to field questions	<input type="checkbox"/> Able to answer questions clearly and without hesitation and prepared material to answer anticipated questions	<input type="checkbox"/> Can answer all questions with some hesitation	<input type="checkbox"/> Able to answer half of the questions with hesitation	<input type="checkbox"/> Unable to answer any questions