SI204 Introduction to Computer Science

Course Policy v1.0, Spring AY20

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Course Description: This course provides an introduction to algorithmic development, problem solving and software design. In particular, students develop the ability to solve problems using the procedural programming paradigm and the C++ language. These principles and concepts provide foundational knowledge and experience upon which later computing courses will build. This is the first course for computer science and information technology majors.

Credits: 3-2-4

Learning Objectives:

1. Solve problems using the procedural programming paradigm.
2. Design, develop, debug, and document computer programs using structured programming techniques.
3. Select and implement the most appropriate data structure for a solution and justify your selection.
4. Identify common uses of documents found on the Internet and explain why each is, or is not, a breach of copyright law. (supports Student Outcome 4).

Student Outcomes:

Graduates of the program will have an ability to:
1. Analysis. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Implementation. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communication. Communicate effectively in a variety of professional contexts.
4. Ethics. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Teamwork. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

CS-6. Theory. Apply computer science theory and software development fundamentals to produce computing-based solutions.
IT-6. Requirements. Identify and analyze user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing based systems.

Textbook(s): No required text

Extra Instruction: Extra instruction (EI) is strongly encouraged and should be scheduled by email with the instructor. EI is not a substitute lecture; students should come prepared with specific questions or problems.

Collaboration: The guidance in the Honor Concept of the Brigade of Midshipmen and the Computer Science Department Honor Policy must be followed at all times. See `www.usna.edu/CS/resources/honor.php`.

You will have to take and achieve a 100% on a Blackboard quiz covering the material in this policy and the departmental Policy Concerning Programming Projects referenced above. You may take the quiz as often as you need to, but you will receive an F at each marking period until you pass it with 100%.

All quizzes and exams must be entirely your own work. All other assignments are considered "routine" unless your instructor specifically indicates that it is a "project." The following summarizes these policies as they apply to this course. Consult your instructor if you need further clarification.
Specific instructions for this course:

- Quizzes and Exams: All written exams and quizzes will be closed book. Practicum exams will be given during a lab period. You may only use your paper-based notes, your own code stored on your CS Department home directory, the official class notes from the web, or your textbook for the practicum. On all exams, quizzes, and practicums you may not receive help from anyone.

- Projects: All projects MUST be submitted in order to pass this class. You must do your own work in designing, implementing, and testing your projects without assistance from anyone except for your instructor or, if properly documented, the other SI204 instructor for this semester, and MGSP leaders. The Department Policy Concerning Programming Projects provides detailed guidance.

- Homework and Labs: Collaborative conversations with regard to syntax and strategies for accomplishing labs and "routine" out of class programming assignments (labs & homework) other than projects are allowed, however design and implementation must be the work of the individual student handing in the final product. Thus, the actual pencil-to-paper or fingers-to-keyboard work must be your own. Copying a file or parts of a file from anyone is prohibited. Midshipmen must clearly state on their assignment whom they collaborated with or received help from — this includes help received from an instructor in EI or from an MGSP mid.
  Note: Although labs are treated as “routine” in this class, so that collaboration is allowed to the same extent as for homework, other courses in the department will treat them differently! So do not assume this is standard!

All collaboration and outside sources should always be cited. The same rules apply for giving and receiving assistance. If you are unsure whether a certain kind of assistance or collaboration is permitted, you should assume it is not, work individually, and seek clarification from your instructor.

Classroom Conduct: The section leader will record attendance and bring the class to attention at the beginning and end of each class. If the instructor is late more than 5 minutes, the section leader will keep the class in place and report to the Computer Science department office. If the instructor is absent, the section leader will direct the class. Drinks are permitted, but they must be in reclosable containers. Food, alcohol, smoking, smokeless tobacco products, and electronic cigarettes are all prohibited. Cell phones must be silent during class.

Late Policy: Penalties for late submission of graded work may vary among courses or from semester to semester, but they will be the same for all sections of a given course. For *this* course:

- Homework must be submitted on time. This will mean submitted at the beginning of the next non-Lab class meeting, unless otherwise noted.

- Labs are due prior to the start of the next lab, unless otherwise noted.

- Project late policy will be described as part of the project write-up.

Grading:

	6 weeks	12 weeks	16 weeks	Final
Homework	10%	10%	10%	10%
Labs	10%	10%	10%	10%
Project	21%	21%	21%	21%
Midtem Exams	41%	41%	41%	20%
Practica	18%	18%	18%	18%
Final Exam	0%	0%	0%	21%
Total	100%	100%	100%	100%