Fall 9-1-2000

CS 401.01: Computer Science for Teachers

Jerry Esmay
The University Of Montana
COURSE SYLLABUS

CS401
Computer Science for Teachers
Instructor: Jerry Esmay
Office: SS401
Phone: 243-2883
Office Hours: 8-5, M-F

Textbook:
None.

Purpose:
The course will introduce the student to the essential principles that guide the use of the
computer in support of the education process. A number of related topics will also be
investigated to include:
1. History of computing.
2. Current computer technology trends including:
   a. Human/computer interfaces.
   b. Graphics.
   c. Languages.
   d. Networking.
   e. Telecommunications.
3. Future directions including artificial intelligence and robotics.
4. Career opportunities.
5. Impact of computers on society, and the ethical and moral obligations inherent in the use
   of computer hardware and software.
6. Content studies and experiences relevant to the computer science curricula grades 5 - 12.
7. Evaluation and selection of hardware and software for school use.
8. Identifying available resources for maintaining currency and learning about new software
   and/or hardware.
9. Pedagogical uses of the computer technology across the curriculum in grades 5-12.
10. Advanced Placement (AP) test preparation.
Homework assignments:

The homework assignments are designed to reinforce and provide application of theories and techniques introduced during the lecture sessions. Students are expected to complete the assignments individually unless the assignment is to be a “team” effort, and the assignments will be collected and graded. Each homework assignment will have a deadline. Late assignments will be accepted only with prior approval of the instructor. Homework assignments, due dates, and grading criteria will be issued as the semester evolves.

Exams:

There will probably only be a final given at the end of the semester. Further information concerning the exam will be disseminated prior to the end of the semester.

Grading: (TENTATIVE)

Course grades will be assigned on the basis of the total points accumulated during the semester. Points can be earned for the following activities:

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>70</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
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Letter grades will be administered using the following point spread:

- A  90 - 100
- B  80 - 89
- C  70 - 79
- D  60 - 69
- F  below 60

Incompletes will be assigned only under unusual circumstances which are acceptable to the instructor.
Class conduct:
If you do not plan on paying attention, please don’t come to class. If you must arrive late or leave early, do so QUIETLY.

Cheating or misuse of the computer facilities will not be tolerated. Offenders will be prosecuted to the fullest extent of the University Student Conduct Rules.

Other:
I plan on making this one of the most memorable classes you take in college, but I will need your help in doing so! If you don’t understand something during the lectures, ask for clarification. If you need extra help see me EARLY.

Key dates:
February 11
- Last day for late registrants to pay fees
- Last day to add or drop by phone
- Last day to receive a partial refund

February 21
- Washington-Lincoln Day Holiday

March 6
- Last day to drop and add courses

March 20-24
- Spring vacation

May 8-12
- Finals week