

# Intro to Programming CSCI 100 Spring 2014

**Instructor:** Nathan Woods

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Office Hours: By Appointment

#### **Course Description**

This course is an introduction to elementary programming techniques using Pseudo code, flowcharting, and C#. A wide range of programs will be written by the student and run on a computer. Students learn the techniques of looping, functions and sub/routines, arrays, variables and data types, user input/output, file input/ output and appropriate programming practices.

## **Course Outcomes**

- Understand the definitions of computer programming, computer programming languages, code, syntax, sequence, iteration, selection, interpreted languages, compiling and instructions.
- Understand the programming concepts and methods common to all computer languages
- Understand control structures, functions/procedures, arrays, classes, and objects.
- Design a flowchart to solve a given business problem.
- Create a program to solve a given problem of moderate complexity
- Understand the differences between procedural and object oriented languages.
- Explore career opportunities in computer programming.

#### **Required Texts**

A Guide to Working with Visual Logic, Thad Crews & Chip Murphy, Course Technology, 2009 (VL) The C# Player's Guide, RB Whitaker, Starbound Software, 2012 (C#)

#### **Attendance and Participation**

Attendance in class is considered the optimal way for students to learn the course material. Attendance will not be graded (but daily lab work will be.)

#### **Grading Policy**

Your final letter grade will be based on the following table. Percentages will be truncated at one decimal place (not rounded).

	93-100% A	90-92.9% A-
87-89.9% B+	83-86.9% B	80-82.9% B-
77-79.9% C+	73-76.9% C	70-72.9% C-
67-69.9% D+	63-66.9% D	60-62.9% D-
Below 60% F		

Projects will have specified due dates and times. Projects not received on time will receive a 10% penalty, with an additional 10% penalty for each twenty-four hours past the original deadline. Assignments more than a week past the original deadline will be graded out of 30% of the original point total.

In-class assessments are due at the end of the designated class time. Lab work is graded on completion, not on quality and is due at the beginning of the next class period. Rare exceptions to deadlines may be made at instructor discretion if there is an ususual or unpredictable circumstance.

The semester is 15 weeks long. Expect a lab each day, Quiz after each chapter (approximately each week), 2 exams and 2 programming assignments.

Activity	Percentage
Labs	10%
Quizzes	10%
Program 1	20%
Program 2	20%
Midterm Exam	20%
Final Exam	20%
Extra Credit	Up to 10%

#### **Academic Accommodations**

Students with physical, cognitive, or learning disabilities who seek accommodations should contact Disability Services Director Ernest Biller, located in Room 119, at 447-6952, or <a href="mailto:ernest.biller@umhelena.edu">ernest.biller@umhelena.edu</a>. Only students registered with the Disability Resources Office are permitted accommodations. All information will be kept confidential.

### **Academic Dishonesty**

Plagiarism, cheating and other forms of academic dishonesty are prohibited. Students guilty of academic misconduct, either directly or indirectly, through participation or assistance, are immediately responsible to the instructor of the class. In addition to other possible disciplinary sanctions, which may be imposed through the regular institutional procedures, as a result of academic misconduct, the instructor has the authority to assign an "F" or a zero for the exercise or examination, or to assign an "FX" in the course which signifies a failing grade due to academic dishonesty.

A single instance of academic dishonesty will result in a F grade for that assignment; a subsequent violation will result in an FX grade for the course and in both cases, I will report the violation to the academic dean.

#### **ALCC: Advising, Learning, and Career Center**

ALCC is open from 8 a.m. to 7 p.m. Monday through Thursday and 8 a.m. to 4 p.m. on Fridays. It is fully staffed with student and faculty tutors who can assist you in just about any academic area of the school. You will also find computers there for your use, and most of the software packages used by your program are on one or more of these computers. These services are free for Helena College students. We recommend that you familiarize yourself with ALCC and know what resources are available when you need them. The computer lab in Room 131 is also made available to students during these hours.

## **Campus Bookstore**

The Bookstore is located on the Donalson Campus on the south side of the building. All required course materials are available for purchase at the Bookstore, as well as supplies, snacks, and Helena College apparel. Bookstore hours are 8:00 a.m. to 4:30 p.m. Monday thru Thursday and 8:00 a.m. to 3:00 p.m. on Fridays, with special hours for Summer Session.

## **Children On Campus**

It is the policy of Helena College University of Montana not to allow non-student children, under the age of 18, of students, employees, or visitors in campus classrooms, laboratories, high-risk areas, work areas, store rooms, hallways, the library, and areas adjacent to classrooms, laboratories, or offices, except under circumstances as defined in this policy. A non-student child who has an illness that prevents him or her from being accepted by a regular day care provider or school, particularly a child with an infectious disease, may not be brought to Helena College under any circumstances.

All Helena College policies shall adhere to and be consistent with applicable federal and state laws and regulations; Board of Regents' policies and procedures; and The University of Montana's policies and procedures.

## **Emergency Campus Closure**

In the event of a campus closure due to weather, emergency or hazardous situation, students will be notified of the campus closure (and re-opening) via the Helena College website homepage, Facebook, and radio or television alerts. Students who have chosen to opt in to the emergency text message alert system will be sent text message updates via the mobile phone number registered with the system.

#### **Email Use**

The Helena College states that all official student email correspondence be sent only to a student's Helena College email address and that faculty and staff consider email from student's official *only* if it originates from a Helena College account. This allows the College to maintain a high degree of confidence in the identity of all individuals and the security of transmitted information. Helena College furnishes each student with a free email account that is to be used in all communication with College personnel.

## **Faculty Support Desk**

This is where you can take makeup tests and where you drop off papers for or pick up papers from instructors – "Red Envelope Service." A photo ID is required for testing or to pick up papers.

## **Library Services**

The library is located on the Donaldson campus next to the main entrance and is open from 8:00 a.m. to 6:00 p.m. Monday through Thursday and 8:00 a.m. to 5:00 p.m. on Fridays. Onsite, the library is a place for quiet study and houses book, DVD and magazine collections. Online, from the <u>Library</u> website, at <a href="http://umhelena.edu/library">http://umhelena.edu/library</a>, you will find a large collection of electronic resources available 24/7 -- databases of eBooks, encyclopedias, and journal articles as well as resource guides to help with your study and research -- accessible from any device with Internet access. The library staff is available to help you with research in the library, by telephone and remotely through chat and email. You can also "Book a Librarian" for one on one research help.

#### Miscellaneous

15 minutes will be allotted for a break between lecture and lab each class period. During this time students may use their cell phones. If a cell phone ring is heard any other time in class, the phone's owner must sponsor snacks for the break of the next scheduled class period. Emergencies are an exception to the cell phone rule. I am available for snack suggestions/ideas.

**NOTE:** This syllabus is subject to change as deemed necessary by the instructor to fulfill the changing needs of the class.



## **Academic Rigor at the Helena College**

We, the faculty members of the Helena College, believe that academic rigor, as a core value, helps promote lifelong learning and is an integral aspect of providing a substantive, responsive and accessible learning environment. Academic rigor means sustaining a learning environment that challenges students to attain high levels of intellectual and technical skills in an ethical manner. Rigor should pervade every aspect of the college: teaching and learning, curriculum, evaluation of student and faculty, outreach, admissions, advising, and student life.

### **Rigorous Teaching**

Rigorous teaching permits faculty members to create learning environments that encourage students to grow in confidence, competence, and control. Rigorous teaching requires a professional commitment to academic discipline and to inspiring students to develop their knowledge and understanding by developing their learning skills. Students should be able to expect faculty members to:

- 1. Strive to clearly communicate the course expectations and have them summarized on the syllabus, and to follow the curriculum;
- 2. Strive to come to class prepared, and to give students useful feedback on their assignments in as timely manner as the situation permits;
- 3. Strive to be available to students outside of the classroom;
- 4. Strive to make assignments relevant, meaningful and challenging;
- 5. Strive to create opportunities for learning in ways geared to students' diverse talents and abilities;
- 6. Strive to reduce, if not eliminate, the students' perceived need to plagiarize and to challenge plagiarism should it occur; and
- 7. Strive to evaluate our courses and ourselves.

## **Rigorous Learning**

To make the most of the college experience, students should approach college in terms of a rigor complementary to the faculties. Rigorous learning requires fortitude, persistence, preparation, hard work, and zeal. Since college shifts students from the teacher-centered style of high school learning to a student-centered style of learning, it places a higher level of responsibility for performance onto the students. Such high performance at a demanding institution can lead to a successful and satisfying career. Therefore, rigorous students should expect themselves to:

- 1. Set high expectations along with a strong sense of collegiate purpose;
- 2. Come to class prepared to work, and to submit assignments by the deadlines;
- 3. Make the most of their time with faculty members in and out of class;
- 4. Treat fellow students and the classroom with respect, and to participate in the academic process;
- 5. Manage their time so they can treat college as real work with real value;
- 6. Participate with complete honesty and integrity;
- 7. Understand that collaboration with classmates on assignments, when required or encouraged, is acceptable behavior as long as the products of those assignments are truly the student's own work;
- 8. Accept responsibility for learning and for the grades earned.
- 9. [Based upon the academic rigor statement of CSU-Chico.]