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Fall 9-1-2021

CSCI 105.H1: Computer Fluency

Jon Cole Swallow
University of Montana, Missoula, jon.swallow@umontana.edu

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Recommended Citation
Swallow, Jon Cole, "CSCI 105.H1: Computer Fluency" (2021). *University of Montana Course Syllabi*. 12195.
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Computer Fluency /Hamilton (Sect: H1, 76048, Fall 2021)

Syllabus

Welcome to Computer Fluency

The world of computers is vast and complex. We will take a deeper dive into computers, covering topics ranging from networking to beginning programming in this course. This course was originally a part of the Computer Support Specialist program offered at Missoula College. Although not required as a part of that program, I hope it will inspire you to continue a course towards a computer science path. Many of you may be new to the college experience. We will be covering a good deal of material in this course. The pace of this class will be quick, with an average of two chapters per week.

There will be the standard amount of homework for a college class; I will ask for at least two hours of homework per hour of class time. I expect you to read the chapters before class. We will use class time to go over concepts and take in additional information. Please be prepared to submit assignments on time. If you cannot accommodate the time frame for an assignment, you must contact me. I am more than willing to work with anyone who needs help. I will list grading and testing policies in the Syllabus. Be prepared to learn and enjoy; I intend this class to be fun as well as a stepping stone to open your eyes to a broader world and hopefully inspire you.

Schedule is tentative

This Syllabus is not a binding contract but rather a tool to help you organize for success. The grading method is solid; this is how I will grade. NO one should fail this class! Extra Credit will be available. This class is an elective and, while challenging, should not be overly difficult. The programming will perhaps be new; don't panic. I will use discretion. If you give me an honest, hard-working effort, you will pass.

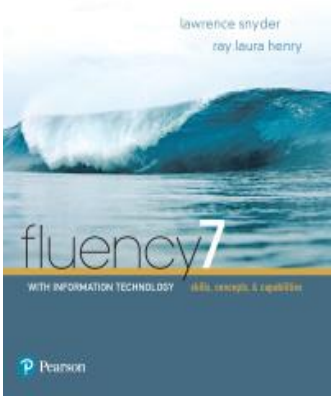
COURSE INFORMATION

- Meeting time and place Monday and Wednesday 9:00 am to 10:20 am.
- Location BC 103 (BC computer Lab).
- Website http://moodle.umt.edu
- 11:00 am -12:30 am Tuesdays and Fridays.
    - If you need help, I will make time for you; call me or speak to me after class to make arrangements outside of office hours.

CONTACT INFORMATION

- Instructor: Jon Swallow
- Email: jon.swallow@mso.umt.edu
- Office: BC Office BC101B
- Phone (406) 273-8790 Cell use discretion, please.

REQUIRED MATERIALS



Fluency with Information Technology

Publisher: Pearson

Print ISBN: 9780134448725, 0134448723
eText ISBN: 9780134449395, 0134449398

Edition: 7th

UMT BOOKSTORE
https://montanabookstore.bncollege.com/

CRN: 76048

A BYTE OF PYTHON

Online Text Free (Bookmark this site)

I will provide additional materials such as the Python programming material when required.

SOFTWARE

We will be working on HTML, CSS, and Python in this class.

You may find the following programs and sites helpful

- ATOM
- Notepad ++
- Github
- Python.org
- Pycharm

TESTING and QUIZZES

Testing and Quizzes will be available via the Moodle shell except for the Midterm and Final.

The Midterm and Final will be written and include fill-in-the-blank, multiple-choice, true or false, and essay questions.

HOMEWORK

Homework will consist of end-of-chapter questions as well as projects and essays. Homework will also be to read the chapter ahead of time see the schedule **

Projects to expect

1. Design a working webpage

2. Design a functional database

3. Design a working program with Python

ACADEMIC HONESTY

You must adhere to the University of Montana Academic Honesty Policy. Cheating will not be tolerated; please do your own work and cite your research sources.

I would encourage you to read and adhere to the Student Code of Conduct found here. CODE OF CONDUCT UMT.

GRADES

Overall Assessments

- Exams 40% 200 pts
- Homework 60% 300 pts
- Extra Credit Essays 20 % 100 pts (You cannot receive a higher grade than an A).

    - A 100-90% 500-450 pts
    - B 90-80% 450-400 pts
    - C 80-70% 400-350 pts Passing
    - D 70-60% 350-300pts
    - F 60% - 300pts or below

In Accordance with UM policies regarding COVID-19.

- Masks are required within BC classrooms and labs.
- Please stay home if you feel sick
    - I will work with you to ensure you have what you need to succeed in the class.
- If you are sick or displaying symptoms, please contact your primary care physician, or you can get tested at the Curry Health Center; (406) 243-4330.
- Please stay up to date with COVID information from the University of Montana Coronavirus Website. https://www.umt.edu/coronavirus/
    - If you are required to isolate or quarantine, I will work with you. I will either go to a blended teaching environment using Zoom, or I will record lectures. I will also make time to have a one-on-one meeting with you during the week to ensure your success.
- UM recommends all students get the COVID-19 vaccine; direct questions or concerns to Curry Health Center; 406) 243-4330.
- Specific seating arrangements will be used, and class attendance will be recorded to support contact tracing efforts.
- Drinking liquids and eating food will be discouraged within the classroom.
    - Removing masks to eat or drink increases the risks of transmission.

SCHEDULE

Monday	Wednesday
Aug 30 **Introductions, Moodle, Expectations** **In-class short essay (not graded)**	**Sept 1** **Chapter 1 Defining Information Technology**
Sept 6 **Happy Labor Day** **No Class**	**Sept 8** **Chapter 2 Exploring the Human-Computer Interface**
Sept 13 **Chapter 3 The Basics of Networking**	**Sept 15** **Chapter 4 A Hypertext Markup Language Primer**
Sept 20 **Chapter 5** **Locating Information on the World Wide Web**	**Sept 22** **Chapter 6 An Introduction to Debugging**
Sept 27 **Chapter 7 Representing Information Digitally**	**Sept 29** **Chapter 8 Representing Multimedia Digitally**
Oct 4 **Chapter 9 Principles of Computer Operations**	**Oct 6** **Chapter 10 Algorithmic Thinking**
Oct 11 **Chapter 11 Social Implications of IT**	**Oct 13** **Chapter 12 Privacy and Digital Security**
Oct 18 **Chapter 13 The Basics of Spreadsheets**	**Oct 20** **Chapter 14 Advanced Spreadsheets for Planning**
Oct 25 **Chapter 15 Introduction to Database Concepts**	**Oct 27** **Chapter 16 A Case Study in Database Organization**
Nov 1 **In class Laboratory Creating a simple Database**	**Nov 3** **Review, makeup, and extra credit in-class time.**

Nov 8 ***A Byte of Python*** **About Python** **Installation** **First Steps**	**Nov 10** **Basics** **Operators and Expressions**
Nov 15 **Control Flow** **Functions**	**Nov 17** **Modules** **Data Structures**
Nov 22 **Problem Solving** **Object-Oriented Programming**	**Nov 24** **Happy Thanksgiving** **No Class**
Nov 29 **Guest Speaker Dr. Engleman** **Tentative In Class Lab**	**Dec 1** **Input and Output** **Exceptions**
Dec 6 **More** **Standard Library**	**Dec 8** **Program due** **Wrapping up** **Discussions**
Dec 13- 17 Finals week TBA	