CIS 115 - Introduction to Computing Science - Abridged Syllabus

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Teaching Assistants

A 1-5: Hayden Woods (hwoods01)	**A 6-10:** Eujun Chin (eujun)
C 1-5: Anastasia King (ananking33)	
B 1-5: Casey Poole (caseypoole)	**B 6-10:** Casey Lafferty (rclafferty)

Grading

Team Assignments
15% - Wiki Article*
15% - Topic Research*

* Team projects include +/- 50% peer review.
* 10% of grade depends on turning in review.

Individual Assignments
28% - Class Attendance and Participation
    (1% each) (2 unexcused absences free)
21% - Programming & Written Assignments
    (3% each, 8 total) (drop 1 lowest)
21% - Online Blog Assignments
    (3% each, 8 total) (drop 1 lowest)

Late Work
Late work will receive penalty of 10% of the possible points for each day it is late. Missed work cannot be made up except under extenuating circumstances.

Required Texts
- "The Pattern on the Stone: The Simple Ideas that Make Computers Work" by W. Daniel Hillis.
  ISBN 046502596X - http://www.amazon.com/dp/046502596X/ Kindle edition available
- "Nine Algorithms That Changed the Future: The Ingenious Ideas That Drive Today's Computers" by John MacCormick.
  ISBN 0691158193 - http://www.amazon.com/dp/0691158193 Kindle edition available
- "Tubes: A Journey to the Center of the Internet" by Andrew Blum.
  ISBN 0061994952 - http://www.amazon.com/dp/0061994952 Kindle edition available

Software - Scratch 2.0: http://scratch.mit.edu
Academic Honesty - The honor system website can be reached at: http://www.ksu.edu/honor.

Getting Help
- Review the course materials posted on K-State Canvas and the course website
- Ask your teammates for help or advice on assignments or projects
- Send assignment questions to your teaching assistant (TA) or instructor via email
- Visit your instructor's office hours, or the office hours for your TA if available
- Schedule a one-on-one meeting with your instructor

CIS 115 - Introduction to Computing Science (Spring 2017)
Schedule (as of 1/15/2017)

Date	Lecture	Topic / Blog Article	Reading (Before Class)	Activity
1/17/17	1	What is Computing Science?	<none>	Get a CIS Account!
1/19/17	2	Teams, Projects, and Success	Syllabus & Assignments	Team Resume
1/24/17	3	Early Computing Machines	POTS 1 - Nuts and Bolts	Visual Programming Intro
1/26/17	4	Bits and Boolean Algebra	POTS 2 - Universal Building Blocks	Loops & Conditionals
1/30/17	Blog 1	**Personal Introduction**		
1/31/17	5	Programming	POTS 3 - Programming	**1 - Loops & Conditionals**
2/2/17	6	Universal Computers	POTS 4 - How Universal are Turing Machines?	Variables & Lists - Turing Machine
2/7/17	7	Algorithms	POTS 5 - Algorithms and Heuristics	**2 - Sorting**
2/9/17	8	Encoding Data	POTS 6 - Memory: Information and Secret Codes	Encoding Worksheet
2/13/17	Blog 2	**Algorithms**		
2/14/17	9	Architecture & Finite State Machines	POTS 7 - Speed: Parallel Computers	**3 - Finite State Machine**
2/16/17	10	Human Computer Interaction	POTS 8 - Computers that Learn and Adapt	<none>
2/21/17	11	History of the Internet	POTS 9 - Beyond Engineering	Internet Discussion
2/23/17	12	High Performance Computing (Dr. Andresen)	TUBES 1 - The Map	**4 - Parallel Programming**
2/27/17	Blog 3	**Making Meaning - POTS**		
2/28/17	13	How the Internet Works	TUBES 2 - A Network of Networks	Packet Switched Network
3/2/17	14	Web Programming 1	TUBES 3 - Only Connect	Web Programming
3/7/17	15	Web Programming 2	TUBES 4 - The Whole Internet	**5 - Web Programming**
3/9/17	16	Software Engineering	TUBES 5 - Cities of Light	<project work time>
3/13/17	Blog 4	**The Internet's Influence**		
3/14/17	17	Computer Graphics	TUBES 6 - The Longest Tubes	Drawing & Moving in Scratch
3/16/17	18	Video Games (Nathan Bean)	TUBES 7 - Where Data Sleeps	Video Game Sample
3/17/2017		**TOPIC RESEACH PROJECT DUE!**		
3/20 - 3/24		**Spring Break - No Class!**		
3/28/17	19	Topic Presentations 1	9ALG 1 - Introduction	<none>
3/30/17	20	Topic Presentations 2	9ALG 2 - Search Engine Indexing	<none>
4/3/17	Blog 5	**Making Meaning - TUBES**		
4/4/17	21	Topic Presentations 3	9ALG 3 - PageRank	<none>
4/6/17	22	Searching & Information Retrieval	9ALG 4 - Public Key Cryptography	Page Rank
4/11/17	23	Cryptography	9ALG 5 - Error Correcting Codes	**6 - Cryptography**
4/13/17	24	Artificial Intelligence	9ALG 6 - Pattern Recognition	**7 - Mars Rover**
4/14/2017		**WIKI ARTICLE DRAFT DUE!**		
4/17/17	Blog 6	**Computer Science & Mathematics**		
4/18/17	25	Compression & Error Correcting	9ALG 7 - Data Compression	Compression Worksheet
4/20/17	26	Informatics & Big Data (Dr. Hsu)	9ALG 8 - Databases	**8 - Video Game**
4/25/17	27	Cybersecurity	9ALG 9 - Digital Signatures	Cybersecurity Demo
4/27/17	28	Computability	9ALG 10 - What is Computable	<none>
4/28/17		**WIKI ARTICLE DUE!**		
5/1/17	Blog 7	**Making Meaning - 9ALG**		
5/2/17	29	*Industry Panel*	9ALG 11 - Conclusion	<none>
5/4/17	30	The Future	<none>	<none>
5/8/17	Blog 8	**Where do I go from Here?**		