Class Schedule

This is a preliminary day-by-day schedule for our class. The instructor will update the schedule on a weekly basis. All readings will be available on the T-square site for the class.

*The reading in italics for any topic is the primary article for that topic.*
*We expect that all students will read the primary article.*
*The quiz on any topic will pertain only to the primary reading.*

We expect the presenter on any topic to also read the supplementary readings on the topic.

<table>
<thead>
<tr>
<th>Date</th>
<th>Readings, videos, deliverables</th>
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| Jan. 6 | Introduction to Computational Creativity  
Videos to watch in class:  
Video 1 - IBM Watson  
(http://www.youtube.com/watch?v=WFR3Io_m-xhE)  
Video 2 - Painting Fool  
(http://www.youtube.com/watch?v=qe5jLirwMV4)  
Video 3 - Robot Musicians  
(http://www.youtube.com/watch?v=VscnR6F20yc)  
Introduction to the class |
| Jan. 8 | Topic: Case Study in Computational Creativity: IBM’s Watson – 1  
Papers: Building Watson *Ferrucci* et al.  
Accompanying video to watch before class:  
https://www.youtube.com/watch?v=3G2H3DZ8rNc&list=PL3iKLMXW18Sp_w5ynmfK4mFUcO8WQICMe&index=14  
Group discussion  
Video to watch in class:  
Musical Stairs  
https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8&q=youtube%20musical%20stairs |
Jan. 13  Topic: General Creativity  
Papers: Csikszentmihalyi (Flow of Creativity), Csikszentmihalyi 2,3,4  
Accompanying video to watch before class:  
https://www.youtube.com/watch?v=W9jaOsxjS1E&index=2&list=PLYnvMG2KnNYACoMfKM-ewZUIT7npBYkTD  
Group exercise  
Video to watch in class – Marshmallow Challenge  
https://www.youtube.com/watch?v=H0_yKBitO8M

Jan. 15  Biologically Inspired Design  
Benyus, Goel  
Video to watch before class:  
https://www.youtube.com/watch?v=k_GFq12w5WU  
Collaborative Project begins  
Design Study Library  
Accompanying paper: Goel et al. AIEDAM  
Video to watch in class: Where Do Ideas Come From:  
https://www.youtube.com/watch?v=NugRZGDbPFU&feature=youtube

Jan. 20  Creativity in Design  
Papers: Dorst&Cross, Schon

Jan. 22  Creativity in Modeling  
Nersessian (2002), Dunbar

Jan. 27  Methods for Studying Creativity  
Cross, V.Goel

Jan. 29  Measures of Creativity  
Shah et al.  
Project Deliverable - 1

Feb. 3  Entrepreneurship in Computational Creativity  
Guest Lecture by Keith McGregor)

Feb. 5  IBM Watson Hackathon – 1

Feb. 10  IBM Watson Hackathon – 2  
Assignment -1

Feb. 12  IBM Watson Hackathon – 3  
Assignment -2
Feb. 17  Georgia Tech classes before 11 am cancelled because of weather

Feb. 19  Case Study in Computational Creativity: IBM’s Watson – 1 Paper
\textit{Wang et al. – Relation Extraction in DeepQA}
\textit{Gondek et al. – Merging Answers in DeepQA}
(Under Case Study – IBM Watson)

Feb. 24  Information-Processing Theories of Creativity
\textit{Boden}
(Under IP Theories of Creativity)

Feb 26  Georgia Tech classes before 11 am cancelled because of weather

Mar. 3  Knowledge Representation
\textit{Markman Ch. 1, Gaerdenfors, Minsky}
Information-Processing Theories of Creativity
\textit{McCorduck}
(Under IP Theories of Creativity)

Mar. 5  Analogical Thinking
\textit{Gentner, Holyoak & Thagard}

Mar. 10  Visual Thinking
\textit{Larkin & Simon, Glasgow & Papadias}

Mar. 12  Conceptual Thinking
\textit{Fauconnier & Turner, Lakoff & Johnson}

Mar. 24  IP Theories of Creativity in Modeling
\textit{Darden, Clement}

Mar. 26  IP Theories of Creativity in Design
\textit{Gero, Goel}

Mar. 31  IP Theories of Team Creativity
\textit{Fischer, Maher}

Apr. 2  Interactive Tools for Creativity in Design
\textit{Szykman et al., Goel et al.}
Interactive Tools for Creativity in Design
Project Deliverable – 3
\textit{Gross & Do, Yaner & Goel}
Apr. 7  Group Creativity  
*Sarmiento & Stahl*  
Team Creativity  
*Stempfle & Badke-Schub*  

Apr. 9  Interactive Tools for Learning about Modeling  
*Biswas et al.*, Vattam et al.  

Apr. 14  Autonomous Systems for Creative Modeling  
Project Deliverable – 4  
*Davies, Goel & Yaner 2008*, Yaner & Goel 2006  

Apr. 16  Autonomous Systems for Creative Design  
*Goel & Bhatta 2004*, Bhatta & Goel  

Ashok Goel  
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