# Course Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Module</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wed Sept 03</td>
<td>13-15</td>
<td>Lecture 1</td>
<td>Intro</td>
</tr>
<tr>
<td>Fri Sept 05</td>
<td>15-19</td>
<td>Lectures 2-3</td>
<td>Group Formation</td>
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<tr>
<td>Wed Sept 10</td>
<td>13-15</td>
<td>Lecture 4</td>
<td>Proposals</td>
</tr>
<tr>
<td>Thu Sept 11</td>
<td>10-12</td>
<td>Lecture 5</td>
<td>Feedback on proposals</td>
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<tr>
<td>Mon Sept 15</td>
<td>8-10</td>
<td>Lecture 6</td>
<td>Hello World! Demos</td>
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<tr>
<td>Thu Sept 18</td>
<td>10-12</td>
<td>Lecture 7</td>
<td>ForskarFredag Preparation</td>
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<tr>
<td>Wed Sept 24</td>
<td>14-16</td>
<td>Lecture 8</td>
<td>Demo Day!!!</td>
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<tr>
<td>Thu Sept 25</td>
<td>16-20</td>
<td>Debaser Invasion</td>
<td>Setup 16:00 – 20:00</td>
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<tr>
<td>Fri Sept 26</td>
<td>8-18</td>
<td>Debaser Domination</td>
<td>ForskarFredag 2014!!!</td>
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<tr>
<td>Mon Sept 29</td>
<td>8-10</td>
<td>Lecture 9</td>
<td>Agile Development of ForskarFredag</td>
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<tr>
<td>Wed Oct 8</td>
<td>13-15</td>
<td>Lecture 10</td>
<td>Agile Development 2</td>
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<tr>
<td>Mon Oct 13</td>
<td>8-10</td>
<td>Lecture 11</td>
<td>Agile Development 3</td>
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<tr>
<td>Wed Oct 15</td>
<td>13-15</td>
<td>Lecture 12</td>
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<tr>
<td>Wed Oct 29</td>
<td>16-23</td>
<td>Kistamässan Invasion</td>
<td>Setup 16:00 – 23:59</td>
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<tr>
<td>Thu Oct 30</td>
<td>10-12</td>
<td>Lecture 13</td>
<td>COMICON 2014!!</td>
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<tr>
<td>Tue Nov 4</td>
<td>10-12</td>
<td>Lecture 14</td>
<td>Reflections on ComiCon</td>
</tr>
<tr>
<td>Wed Nov 5</td>
<td>10-12</td>
<td>Lecture 14</td>
<td>New groups</td>
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<tr>
<td>Fri Nov 7</td>
<td>15-19</td>
<td>Lectures 15-16</td>
<td>Epson Moverio Workshop</td>
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<tr>
<td>Tue Nov 11</td>
<td>10-12</td>
<td>Lecture 17</td>
<td>Proposals</td>
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<tr>
<td>Tue Nov 18</td>
<td>10-12</td>
<td>Lecture 18</td>
<td>Feedback on proposals. Early hello world demos</td>
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<tr>
<td>Tue Nov 25</td>
<td>10-12</td>
<td>Lecture 19</td>
<td>Hello world demos</td>
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<tr>
<td>Tue Dec 2</td>
<td>10-12</td>
<td>Lecture 20</td>
<td>Demo Day!!!</td>
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<tr>
<td>Thu Dec 4</td>
<td>15-18</td>
<td>VIC Invasion</td>
<td>Prepare Open House</td>
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<tr>
<td>Fri Dec 5</td>
<td>15-19</td>
<td>Open House</td>
<td>AGI14-VIC Open House</td>
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</tbody>
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9/5/2014 AGI14
Assignment 1 for today

1. Answer this Survey
2. Watch these videos and answer this survey:
   1. 2012 SIGGRAPH Technical Papers
   2. 2012 SIGGRAPH Emerging Technologies
   3. 2013 SIGGRAPH Technical Papers
   4. 2013 SIGGRAPH Emerging Technologies
   5. 2014 SIGGRAPH Technical Papers
   6. 2013 SIGGRAPH Emerging Technologies
3. Read this six-page paper and answer this survey:
   1. Romero 2013
4. Read this six-page paper and answer this survey:
   1. Romero et al 2014
5. Familiarize yourself with KTH Social and Facebook group pages
6. Think of what you would like to build in AGI14
Agenda

1. Demo: Milo Embodied Sculpting
2. KTH Social and Facebook announcements (Assignment 1.5)
3. Personal Presentations (Assignment 1.1)
4. Questions on Course Structure (Assignment 1.2)
5. Break
6. Presentation SuitMe – Emil Harðarson
7. Group Formation (Assignment 1.1)
8. What is a good Proposal? (Assignment 1.3, 1.4)
9. Break
10. Brainstorming (Assignment 1.2)
11. Break
12. Feedback on Brainstorming
13. Pizza and a Movie
Feedback on Demo

MILO
EMBODIED SCULPTING

ADV. INT. C.V. (1ST PERSON PERSPECTIVE)

W/O AUD

- TRACKING (+ KINECT)
- MODEL (ARM)
- TEMPORAL INTERPOLATION /
- SMOOTHING
- KALMAN FILTERING

- LINEAR
- QUADRATIC
- BI-CUBIC INT.

RENDERING

5 TECHNIQUE

MATERIALS

4K 3D

MEDICINE

- BODY SCAN
- MED IMAGING
- AUDIENCE
- EDUCATION

- CLASSIFICATION
- FALSE POSITIVE
- FALSE NEGATIVE
- PRECISION
- RECALL

OPERATION

9/5/2014 AGI14
KTH Social and Facebook
Personal Presentations
Questions on Course Structure?
Review of AGI14

• Intended Learning Outcomes:
  1. Collaborate to build original and stable projects that combine methods in advanced computer graphics and advanced human-computer interaction;
  2. Communicate the theory and practice of these methods at a technical and a practical level;
  3. Provide informed constructive criticism to the development of the projects from other teams;
  4. Demonstrate the projects at large public venues to open audiences.
AGI14 Grade Assignment

- Project 1 50%
- Project 2 40%
- Assignments 10%
  - < 100 minutes/week
  - Reading
  - Writing
  - Coding
  - Interacting
Project 1 (50%)

- Proposal: 5% 10/9
- Demo: 5% 24/9
- Forskar Fredag: 10% 26/9
- Deliverable 1: 5% 28/10
- ComiCon: 10% 30/10
- Open House KTH: 10% 5/12
- Deliverable 2: 5% 12/12
Project 2

- Proposal: 5% (11/11)
- Demo: 10% (2/12)
- Open House KTH: 15% (5/12)
- Deliverable: 10% (12/12)
Deliverables

• Working VIC Demo
• Code with good comments
• Webpage
  – Description
  – Photos
  – “Making of” documentary (2 minutes)
  – Demo Reel (30 seconds)
  – PR Material: logo, trailer, flyers, posters, catalog...
  – User Testimonials
Project 2 – Epson Moverio
MOVERIO
A new way of seeing the world
Project 2

• Fri Nov 7 15-19
• Lectures 15-16
• Epson Moverio Workshop
Suit Me
Forming Groups

Algorithm?
Four Groups
Matched Content Interests
Mixed Skills
Mixed Technical Interests
Michelangelo

• Stefan
• Johan B
• Oscar
Leonardo

- Carl
- Anton
- Johan S
Donatello

• Søren
• Philip
• Daniel
• Axel
Megatron

- Christoffer
- Mattias
- Ludwig
- Linnea
What is a good proposal?

• Project Goal
• Literature Review
• Work Plan
• Risk Assessment
• Presentation
Proposal for Project 1 Title

Cool Photo of Student 1
email1@kth.se

Cool Photo of Student 2
email2@kth.se

Cool Photo of Student 3
email3@kth.se

Advanced Graphics and Interaction
AGI14
2014/09/10
Project 1 Title

Really cool image of your project!!
Outline

- Motivation 1 minute
- Goals and Challenges 3 minutes
- Related Work 2 minutes
- Methods and Techniques 4 minutes
- Discussion 5 minutes

TOTAL 15 minutes
Motivation

• Why is this project interesting to me?
• Why is this project interesting to you?
• What do I want to learn by doing this project?
• Why does the world need this project?
• How does this project make the world a better place?
Goals and Challenges

• Goals
  – What this project accomplishes in the first place
  – What this project accomplishes in 2nd place
  – What this project accomplishes in 3rd place

• Challenges
  – What are the obstacles to attaining goal 1
  – What are the obstacles to attaining goal 2
  – What are the obstacles to attaining goal 3
Related Work (maybe a Table?)

• Similar cool project number one with image
  – Author
  – Year
• Similar cool project number two with image
  – Author
  – Year
• Similar cool project number three with image
  – Author
  – Year
Similar Cool Project 1

• Cool video or image demonstrating the proposal.
• Say what the related project was about and how it is related to your proposed project.
• Clearly state what about your project is different from this project.
• Clearly state why these differences matter.
• Only show a video or figure, no text on this slide.
Similar Cool Project 2

• Cool video or image demonstrating the proposal.
• Say what the related project was about and how it is related to your proposed project.
• Clearly state what about your project is different from this project.
• Clearly state why these differences matter.
• Only show a video or figure, no text on this slide.
Similar Cool Project 3

• Cool video or image demonstrating the proposal.
• Say what the related project was about and how it is related to your proposed project.
• Clearly state what about your project is different from this project.
• Clearly state why these difference matter.
• Only show a video or figure, no text on this slide.
Methods and Techniques

• What methods will you use in your project?
• What devices will you use?
• What libraries will you import?
• How will you connect the parts?
• Will you develop anything new that can be contributed back to the world as code or design pattern, etc?
• What interaction paradigms will you use?
• Will you design new interactions or new algorithms?
• You should talk about these methods and techniques on separate slides using as many visual and video aids as possible, keeping a close eye on your time
Thank you!

Questions?

Student One {email1@kth.se}
Student Two {email2@kth.se}
Student Three {email3@kth.se}
Teacher {email4@kth.se}

For more information go to: www.project1.se
In case they ask

EXTRA SLIDES
Group Members

• Who you are
• Major, graduation year, career goals
Individual Contributions

• Student 1 will do
  – A lot
  – So much
• Student 2 will do
  – A lot
  – So much
• Student 3 will do
  – A lot
  – So much
Anything else
Next Class

• Wed Sept 10 13-15
• Lecture 4 Proposals
BREAK
Brainstorming

• Start with idea
• Think of technology supporting
• Take inventory of hardware and skills
• Test feasibility
PIZZA AND A MOVIE
Thank you!

marior@kth.se

Questions?