



**THE UNIVERSITY**  
*of* **NORTH CAROLINA**  
*at* **CHAPEL HILL**



**MASSIVE OPEN ON-LINE  
COURSES (MOOCS)**

**University Affairs**  
**November 2012**

**Bruce W. Carney**  
**Executive Vice Chancellor & Provost**

# A brief (and incomplete) history



- The Khan Academy. Free on-line brief lectures prepared by Salman Khan has evolved into an enterprise with 3500 videos. The total number of lessons delivered exceeds two hundred million.  
[www.khanacademy.org](http://www.khanacademy.org)
- The effort is funded by foundations and individuals and volunteers act as coaches and teachers.
- The lessons are quite good, although they're necessarily static.



# The next steps



- Salman Khan  $\Rightarrow$  Sebastian Thrun + Peter Norvig.
- July 2011 on-line course in Artificial Intelligence.
- 160,000 enrolled; 28,000 completed.
- Top 1,000 students asked for resumes.
- Of 248 people with perfect scores, none were from Stanford — what might that tell us?
- Three major platforms emerged quickly.



# UDACITY

- **With funding from Charles River Associates, Thrun founded Udacity.**
- **Courses, assessments, certificates are free.**
- **Focus is on STEM courses.**
- **Revenue generation uncertain but may come from modest per-student costs for tutoring, authenticated certificates, advertising, or, most likely, career placement services.**





- **Dec 2011: MITx; May 2012: joined by Harvard, each investing. \$30M. UC Berkeley has now joined. Non-profit, led by Anant Agarwal from MIT.**
- **The first course enrolled 122,000 students.**
- **The revenue model has not been developed or, at least, it has not been revealed.**
- **Courses have fixed terms, unlike Udacity.**
- **Class discussion boards, automated assessment, lectures and quizzes. Cannot handle essays etc. yet.**



# **coursera**

- **Founded by Daphne Koller & Andrew Ng (Jan 2012)**
- **It is a for-profit company, with significant funding, and appears to be driven to provide a larger suite of courses. The business model is unclear.**
- **It partners only with “elite” universities, AAU members only, it appears.**
- **Coursera is primarily a platform, with faculty at member universities developing and delivering course content, exams, etc.**



## Comparison of Course Offerings

<b>FIELDS</b>	<b>Coursera (199)</b>	<b>Udacity (18)</b>	<b>edX (8)</b>
<b>Computer Science</b>	<b>37</b>	<b>13</b>	<b>7</b>
<b>Other STEM</b>	<b>53</b>	<b>4</b>	<b>0</b>
<b>Bus./Finance/Econ.</b>	<b>23</b>	<b>1</b>	<b>0</b>
<b>Environmental Sci.</b>	<b>9</b>	<b>0</b>	<b>0</b>
<b>Social Sciences</b>	<b>15</b>	<b>0</b>	<b>0</b>
<b>Languages</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Humanities/Arts</b>	<b>20</b>	<b>0</b>	<b>0</b>
<b>Health Affairs</b>	<b>39</b>	<b>0</b>	<b>1</b>
<b>Education</b>	<b>2</b>	<b>0</b>	<b>0</b>
<b>Law</b>	<b>1</b>	<b>0</b>	<b>0</b>

# Issues requiring consideration



- **Quality of instruction: are static courses suitable and what about teacher-less courses?**
- **Credentialing the courses.**
- **Course credit? Beginning to emerge in high schools and now at Antioch University.**
- **Revenue generation?**
- **How can development of such courses improve our residential courses, our new hybrid courses in particular?**



# What are we doing?



- **Conversations with the deans — identify a set of courses for initial offering.**
- **Establish an advisory committee to help us identify opportunities and risks, both financial and instructional.**
- **Are there selective, revenue-generating opportunities for us beyond the platforms described earlier?**

