Challenges for an R1 school

Positive Pressures

Changes needs to scale
~1000 students/intro course
~100 students/advanced course

Research Demand/Expectations
Time, energy, and interest vary
Instruction by TAs/LAs

Large, Diverse Faculty
Time, energy, and interest vary
Big Changes -> Big Discussion

Resourcing
Service courses make $$$
Courses taught at "scale"

Supportive Colleagues
inc. Dean/Chair/Undergrad Chair

Research Demand/Expectations
Grants for Educational Transformation
Physics Education Research Group

Large, Diverse Faculty
Diverse expertise and experience
Strong interest in computing

State-level Investment
New STEM Teaching Building

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Timeline of Integrating Computation at MSU

Typical Course Progression

	F13	S14	F14	S15	F15	S16	F16	S17	F17	S18	F18	S19	F19	S20	F20	S21		F2X
Intro. Mech.																		
Intro. E&M																		
CMSE 201*																		
Modern Phys.																		
Class. Mech. 1																		
Quantum 1																		
Quantum 2																		
E&M 1																		
E&M 2																		
Stat. Mech.																		