

Jonathan Dietz

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Online Teaching (Current)

American International College, Springfield, MA Spring 2020-Present

- EDU 5913 STEM Education for the 21st Century(K-5)
- EDU 6673 Science Methods
- EDU 3650 Inquiry-Based Science and Social Studies
- AIC Program supervisor, Secondary Mathematics Spring 2020

Classroom Teaching:

- School Volunteer, Newton North High School
Green Engineering program,[2016-2018]
- PBL Unit Mentor, Weston Middle School [June 2017, June 2018]
- Technology Education Teacher, Weston Middle School [2002-2016]
- Biology Teacher, Weston Middle School [2003-2004, 2005-2006]
- Math (AOPS Geometry)- Blended Learning Course [2013]
- Physical Science Teacher, Weston Middle School [2003-2004]

Informal/Summer/

- Academy for Advanced R&D- Microcontrollers and AI for Middle School- 2019-2020
- MIT Edgerton Center- Learning Supported by Making Teacher Workshops
- Boston Leadership Institute- Electronics and Robotics Summer Course
- Meadowbrook School of Weston Eureka Lab, Afterschool Makerspace Instructor [2017-2018]
- MIT Engineering Design Workshop(1-month summer course)- Mentor[2018, 2017, 2016, 2015]
- After-School Coach, Science Club, Weston Middle School [2003-2012]
- After-School Coach, Arduino Club [2013]

Online Curricula:

- STEM Education for the 21st Century <https://sites.google.com/view/aic-stem-education/home> (also on BlackBoard LMS)
- Methods in Teaching Inquiry-Based Science <https://sites.google.com/steamstudio.org/edu6673/course-home>

- Physical Computing, Scratch, and A.I.
<https://sites.google.com/steamstudio.org/intelligentdevices/home>
- SteamStudio Curriculum <http://steamcurriculum.weebly.com/>
- Grade 7 Lego EV3 Curriculum
<http://westonk12engineering.org/robotics/index.htm>
- Grade 7 Structures
<http://westonk12engineering.org/structures/index.htm>
- Grade 8 Woodworking
<http://westonk12engineering.org/woodworking/index.htm>
- Grade 8 Robotics and Making <http://roboticsandmaking.weebly.com/>
- Grade 8 Geometry <http://westongeometry.pbworks.com/>

MIT Edgerton Center Media:

- US-China Sci-tech at MIT Edgerton Center <https://youtu.be/1jsQrTM0Wj4>
- Engineering Design Workshop Interview: <https://youtu.be/TRh4lZ0ethY>
- Engineering Design Workshop- Interview with Cheetiri Smith
<https://youtu.be/LHGNkYoLvY>
- Edgerton Image Gallery <https://edgerton.mit.edu/images-and-video/image-gallery>
- MIT Engineering Design Workshop(Website):
<https://www.engineeringdesignworkshop.com/>
- EDW Blog(2019): <https://dietzedw2019.blogspot.com/2019/07/day-7-july-11th-gtl-project-visit-to.html>
- Interview with Calvin, Tech Boston Academy: Trash Locator App
<https://youtu.be/LUx2fO4mAwQ>
- Middle School Project-Based Learning <https://youtu.be/8YezJCM67bs>

Other

- Curriculum Planner, SteamStudio Foundation, 2016-2020
- Supervisory Biomedical Engineer, VA Medical Center, West Roxbury, MA [1975-2000]

Education

Tufts University-Center for Engineering Education Outreach (CEEEO) [2014-2015]
Visiting Scholar- Wrote publications for Legoengineering.com, audited university courses in Robotics, Bioinformatics, and music; developed electronics projects in robotics and music.

Simmons College, Boston, MA [2000-2002]

Master of Arts in Teaching with science education specialization
Full-year internship at Driscoll School, Brookline, MA with Jim Parziale, Ph.D.

Massachusetts Institute of Technology, Cambridge, MA. [1973-1975]
Bachelor of Science in Electrical Engineering with Bioelectronics specialization;

Massachusetts Institute of Technology, Cambridge, MA. [1969- 1973]
Bachelor of Science in Life Sciences
Boit Prize, English Composition;
Sigma Xi - Achievement in scientific research

Certifications

MA Professional Certification: Biology 5-9 [Renewed 2017]
Sheltered English Immersion Endorsement-DESE [June 2016]
MA Provisional Certifications: Technology Education 5-9 [2002]
General Science 5-9 [2002]

International Certification in Clinical Engineering[1978]

Skills

General:

- Project-based Instruction and curriculum planning
- Biology
- Lego Robotics
- Arduino /Electronics and Robotics
- Lasercutting
- 3-D Printing
- Design and Structures
- Woodworking
- Mathematics (Geometry)
- General Science
- Photography and Video

Computer Skills:

- Arduino Programming
- MicroBit Make Code
- Scratch Programming
- Cura 3D Printing Software
- Adobe Illustrator
- Lego Mindstorms EV3 Programming
- West Point Bridge Designer
- AutoDesk Fusion 360
- Trimble SketchUp
- Apple I-Movie

- WeVideo
- Adobe Photoshop

References:

- Ed Moriarty, Lecturer, MIT Edgerton Center mory@mit.edu
- David Birnbach, MIT Sloan Lecturer , SteamStudio Foundation
birnbach@mit.edu
- Diane Brancazio, Maker Educator, MIT Edgerton Center
dianeb@mit.edu
- Margaret Burns, Teacher, Weston Public Schools
burnsm@weston.org