

3D Assessment

Tuesday

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|-------------------|-----|---|-------------|
| 08:30 AM-09:30 AM | 006 | Planning 3D Assessment of Student Growth in Science Learning | Maclean |
| 01:00 PM-02:00 PM | 040 | Applying Mathematics in Science Inquiry to Deepen Understanding of Scientific Phenomena | Dod |
| 02:00 PM-03:00 PM | 051 | Applying Synthesis Skills in AP Environmental Science | Witherspoon |
| 02:30 PM-03:30 PM | 055 | Integrating Civic Competencies Into Science Learning: Features of a Climate Change Assessment Task. | Lowrie |

3D Assessment

Wednesday

| | | | |
|-------------------|-----|--|------------|
| 08:30 AM-09:30 AM | 106 | Let's Jam Out!: Exploring Phenomena Through Collaborative Digital Modeling | Rush |
| 10:00 AM-11:00 AM | 115 | Experience Kinematics: Using Real Data to Understand Motion | Rush |
| 11:30 AM-12:30 PM | 126 | Adapting 3D NGSS Performance Tasks for Interdisciplinary Use with "Think and Discuss" Activities | Fitzgerald |
| 12:00 PM-01:30 PM | 135 | Claim, Evidence and Reasoning 2.0 | Nassau 24 |
| 02:00 PM-03:30 PM | 145 | Making Assessment More Meaningful | Bainbridge |
| 02:30 PM-03:30 PM | 148 | Transforming Existing Assessment Resources to Support 3D Learning of Engineering Design | Fitzgerald |
| 02:30 PM-03:30 PM | 149 | Utilizing A Teacher Alert System to Support Student Improvement on Science Practices | Lowrie |

B/LS

Tuesday

| | | | |
|-------------------|-----|--|--------|
| 08:30 AM-09:30 AM | 004 | Creating an Integrated Biology and Chemistry Core Sequence | Henry |
| 08:30 AM-09:30 AM | 005 | The TerrAqua Column Experiment ~ An Inductive Approach to Learning | Lowrie |
| 08:30 AM-09:30 AM | 007 | Using Molecular Tools to identify Antibiotic Resistant Genes in Environmental DNA (eDNA) | Mercer |
| 08:30 AM-09:30 AM | 009 | StreamWatch Schools | Rush |

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|-------------------|-----|---|-------------|
| 08:30 AM-09:30 AM | 011 | Utilization of Student Created 3D Models in Biological Sciences | Witherspoon |
| 10:00 AM-11:30 AM | 014 | Equity and Engagement in Science | Carnahan |
| 10:00 AM-11:00 AM | 019 | Visualize Transcription and Translation in Real-time Using Hands-on Tools from BioBits® | Mercer |
| 10:00 AM-11:30 AM | 022 | Using Inquiry to Investigate Misconceptions about COVID-19 Vaccines | Rush |
| 10:30 AM-12:00 PM | 026 | Discover the Ocean as an Aquanaut with the Fabien Cousteau Ocean Learning Center (FCOLC)! | Bainbridge |
| 11:30 AM-12:30 PM | 028 | Blending Biochemistry Into K-12 Science: Modeling the Nano-Biosphere | Fitzgerald |
| 11:30 AM-12:30 PM | 029 | Forensic Science: Inexpensive, Engaging, Fun Demos, Models and Activities | Lowrie |
| 11:30 AM-12:30 PM | 031 | Designing DNA analysis experiments with the Genes in Space contest | Mercer |
| 12:00 PM-01:30 PM | 038 | Starla's Hands-On Body Systems: Digestion and Nutrients | Witherspoon |
| 01:00 PM-02:00 PM | 044 | Viral Diagnostics Lab: Explore the Tools and Techniques Behind COVID Testing | Mercer |
| 01:30 PM-02:30 PM | 045 | Proteins: The Star of the Show | Carnahan |
| 02:30 PM-03:30 PM | 057 | Conservation Genetics Lab: Discovering Lemur Diversity | Mercer |

B/LS

Wednesday

| | | | |
|-------------------|------|---|----------|
| 08:30 AM-09:30 AM | 108A | Let it Glow - The Next Generation Transformation MiniLab | Carnahan |
| 10:00 AM-11:00 AM | 112 | Spread of Disease | Dod |
| 11:30 AM-12:30 PM | 129 | Bringing Real Human Genetics Research into Your Classroom | Wilson |
| 01:30 PM-02:30 PM | 142 | Integrating Problem Based Learning and Student Choice into High School Life Science Instruction | Henry |

C**Tuesday**

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| 08:30 AM-09:30 AM | 004 | Creating an Integrated Biology and Chemistry Core Sequence | Henry |
| 08:30 AM-09:30 AM | 009 | StreamWatch Schools | Rush |
| 10:00 AM-11:00 AM | 015 | Students Solve the STEM Case: Analyzing Ocean Carbon Equilibrium IRL | Dod |
| 10:30 AM-11:30 AM | 025 | Integrating Technology Into the Secondary Classroom | Wilson |
| 11:30 AM-12:30 PM | 028 | Blending Biochemistry Into K-12 Science: Modeling the Nano-Biosphere | Fitzgerald |

C**Wednesday**

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|-------------------|-----|---|-----------|
| 12:00 PM-01:00 PM | 132 | Laboratory Safety: Getting Back to Normal | Nassau 25 |
| 01:00 PM-02:00 PM | 141 | Making Science Inquiry Work for Emergent Bilinguals | Wilson |

Climate/NJ**Tuesday**

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|-------------------|-----|---|-------------|
| 08:30 AM-09:30 AM | 001 | Understanding the Science of How Climate Change is Impacting New Jersey | Carnahan |
| 08:30 AM-09:30 AM | 002 | Marine Science, Climate Change, and the NGSS | Dod |
| 10:00 AM-11:00 AM | 016 | Climate Change and Environmental Justice for Grades 6-12 | Fitzgerald |
| 10:00 AM-11:00 AM | 017 | 2020 New Jersey Student Learning Standards and their Effect on Climate Change Education K - 5 | Lowrie |
| 10:00 AM-11:30 AM | 023 | Addressing Climate Change Student Learning Standards | Witherspoon |
| 12:00 PM-01:00 PM | 037 | How Might Climate Change Affect Your Community? | Wilson |
| 01:00 PM-02:00 PM | 042 | 2020 New Jersey Student Learning Standards and their Effect on Climate Change Education 6-12 | Lowrie |

Climate/NJ**Wednesday**

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|-------------------|-----|--|-------------|
| 08:30 AM-09:30 AM | 100 | Sands-On Science: Making Models to Teach Coastal Climate Change | Dod |
| 08:30 AM-09:30 AM | 101 | The New Jersey Student Climate Challenge: Educating and Empowering Youth for Climate Action | Fitzgerald |
| 08:30 AM-09:30 AM | 102 | Teaching New Jersey's Impacts from Climate Change Through Place-Based and Problem-Based Learning | Henry |
| 08:30 AM-09:30 AM | 108 | NJ State Science Day - NEW and IMPROVED! | Witherspoon |
| 10:00 AM-11:30 AM | 117 | Diving Deep into Teaching and Learning about Climate Change | Henry |
| 11:30 AM-12:30 PM | 125 | Extreme Storms Cause Flooding in NJ- How Do We Manage Storm Water? | Dod |

Climate/Society

Tuesday

| | | | |
|-------------------|-----|---|-------------|
| 08:30 AM-09:30 AM | 001 | Understanding the Science of How Climate Change is Impacting New Jersey | Carnahan |
| 08:30 AM-09:30 AM | 002 | Marine Science, Climate Change, and the NGSS | Dod |
| 08:30 AM-10:00 AM | 013 | GLOBE Mission Earth: Fusing GLOBE with NASA Assets to Investigate Climate Change | Nassau 25 |
| 10:00 AM-11:00 AM | 015 | Students Solve the STEM Case: Analyzing Ocean Carbon Equilibrium IRL | Dod |
| 10:00 AM-11:00 AM | 016 | Climate Change and Environmental Justice for Grades 6-12 | Fitzgerald |
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| 10:30 AM-11:30 AM | 024 | Sustainability Challenge - Build a Better School | Nassau 25 |
| 10:30 AM-12:00 PM | 026 | Discover the Ocean as an Aquanaut with the Fabien Cousteau Ocean Learning Center (FCOLC)! | Bainbridge |
| 12:00 PM-01:00 PM | 035 | Building Data Skills through Polar Science | Nassau 25 |

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| 12:00 PM-01:00 PM | 037 | How Might Climate Change Affect Your Community? | Wilson |
| 12:00 PM-01:30 PM | 038 | Starla's Hands-On Body Systems: Digestion and Nutrients | Witherspoon |
| 12:30 PM-01:30 PM | 039 | Atmosphere, Climate, and Global Warming | Bainbridge |
| 01:00 PM-02:00 PM | 042 | 2020 New Jersey Student Learning Standards and their Effect on Climate Change Education 6-12 | Lowrie |
| 01:30 PM-02:30 PM | 046 | Project-based Climate Change High School Lesson Plans | Henry |
| 02:30 PM-03:30 PM | 055 | Integrating Civic Competencies Into Science Learning: Features of a Climate Change Assessment Task. | Lowrie |

Climate/Society

Wednesday

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| 08:30 AM-09:30 AM | 101 | The New Jersey Student Climate Challenge: Educating and Empowering Youth for Climate Action | Fitzgerald |
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| 10:00 AM-11:00 AM | 116 | Utilizing Discussions, CER, and Research to Teach Climate Change | Wilson |
| 10:00 AM-11:30 AM | 118 | Understanding Global Climate Change on Multiple Scales | Maclean |
| 11:30 AM-12:30 PM | 126 | Adapting 3D NGSS Performance Tasks for Interdisciplinary Use with "Think and Discuss" Activities | Fitzgerald |
| 12:00 PM-01:00 PM | 131 | Using Climate Change as a Theme for Teaching Science and Engineering | Henry |
| 12:00 PM-01:30 PM | 134 | Teaching Climate Change in K-5 Classrooms | Maclean |
| 02:00 PM-03:30 PM | 146 | Teaching the Human Dimensions of Climate Change | Maclean |

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| 02:30 PM-03:30 PM | 148 | Transforming Existing Assessment Resources to Support 3D Learning of Engineering Design | Fitzgerald |
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E/SS

Tuesday

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| 08:30 AM-09:30 AM | 010 | Argument-Driven Inquiry in the Life, Physical, and Earth-Space Sciences | Wilson |
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| 11:30 AM-12:30 PM | 031 | Designing DNA analysis experiments with the Genes in Space contest | Mercer |
|-------------------|-----|--|--------|

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|-------------------|-----|---|------------|
| 12:30 PM-01:30 PM | 039 | Atmosphere, Climate, and Global Warming | Bainbridge |
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E/SS

Wednesday

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|-------------------|-----|--|---------|
| 08:30 AM-09:30 AM | 104 | Using Climate Proxies to Learn About Earth's Climate History | Maclean |
|-------------------|-----|--|---------|

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|-------------------|-----|--|-----|
| 11:30 AM-12:30 PM | 125 | Extreme Storms Cause Flooding in NJ- How Do We Manage Storm Water? | Dod |
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|-------------------|-----|-----------------------------------|----------|
| 12:00 PM-01:00 PM | 130 | How About a Field Trip...to Mars! | Carnahan |
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| 01:00 PM-02:00 PM | 137 | Engaging Students in Understanding Weather | Dod |
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Engineering

Wednesday

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|-------------------|-----|--|------------|
| 10:00 AM-11:00 AM | 113 | Integrating an Aviation & Aerospace Program into your School | Fitzgerald |
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|-------------------|-----|--|-------------|
| 10:00 AM-11:30 AM | 120 | MISSION ONE: BRT (Bottle Rocket Transport) | Witherspoon |
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|-------------------|-----|---|------|
| 02:30 PM-03:30 PM | 151 | Engineering: The Link Connecting Science, Technology and Math in STEM | Rush |
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ENV

Tuesday

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|-------------------|-----|--|--------|
| 08:30 AM-09:30 AM | 005 | The TerrAqua Column Experiment ~ An Inductive Approach to Learning | Lowrie |
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|-------------------|-----|--|--------|
| 08:30 AM-09:30 AM | 007 | Using Molecular Tools to identify Antibiotic Resistant Genes in Environmental DNA (eDNA) | Mercer |
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| 10:30 AM-11:30 AM | 024 | Sustainability Challenge - Build a Better School | Nassau 25 |
| 01:30 PM-02:30 PM | 046 | Project-based Climate Change High School Lesson Plans | Henry |
| 02:00 PM-03:00 PM | 051 | Applying Synthesis Skills in AP Environmental Science | Witherspoon |
| 02:30 PM-03:30 PM | 057 | Conservation Genetics Lab: Discovering Lemur Diversity | Mercer |

ENV

Wednesday

| | | | |
|-------------------|-----|---|---------|
| 08:30 AM-09:30 AM | 107 | The Alliance for NJ Environmental Education, Come Join Us. | Wilson |
| 10:00 AM-11:00 AM | 116 | Utilizing Discussions, CER, and Research to Teach Climate Change | Wilson |
| 02:00 PM-03:30 PM | 146 | Teaching the Human Dimensions of Climate Change | Macleam |
| 02:30 PM-03:30 PM | 151 | Engineering: The Link Connecting Science, Technology and Math in STEM | Rush |

Equity/Access

Tuesday

| | | | |
|-------------------|-----|--|------------|
| 08:30 AM-10:00 AM | 012 | Teach Data Better in Science: Unpack "Analyze & Interpret" | Bainbridge |
| 10:00 AM-11:00 AM | 020 | Initiatives to Find the Lost Einsteins - The Integration of Independent Scientific Research Projects | Nassau 24 |
| 10:00 AM-11:30 AM | 021 | Sensemaking and Productive Talk | Henry |
| 11:30 AM-01:00 PM | 032 | Innovations to Tackle the STEM Gap in Underserved Communities | Nassau 24 |
| 01:00 PM-02:00 PM | 043 | OpenSciEd Professional Learning Community | Macleam |
| 01:30 PM-03:00 PM | 049 | Teaching Science Through Issues to Increase Engagement, Meet the NGSS, and Prepare Citizens | Rush |
| 02:00 PM-03:00 PM | 050 | Increasing Science Engagement Through Community Collaboration | Bainbridge |
| 02:30 PM-03:30 PM | 058 | NJSTA Fall Membership Meeting | Nasau 25 |

Equity/Access

Wednesday

| | | | |
|-------------------|-----|---|-------------|
| 08:30 AM-09:30 AM | 105 | An Introduction to Developing a Science Research Program | Nassau 24 |
| 08:30 AM-10:00 AM | 109 | Creating Learning Progressions | Bainbridge |
| 10:00 AM-11:30 AM | 119 | APS STEP UP: Evidence-Based Resources to Remove Barriers to Careers in Physics | Nassau 24 |
| 10:30 AM-11:30 AM | 122 | Culturally Relevant Physics with "The New Normal" | Nassau 25 |
| 10:30 AM-12:00 PM | 124 | Data, Tables, Graphs, Oh My! Beginning Strategies to Bring Real-World Data Literacy into Classrooms | Mercer |
| 12:00 PM-01:00 PM | 133 | Focusing Student Learning Using CCCs Lens! | Witherspoon |
| 01:00 PM-02:00 PM | 140 | Where Do I Go from Here? Career Development Options for Science Teachers who Aspire to Do More | Rush |
| 01:00 PM-02:00 PM | 141 | Making Science Inquiry Work for Emergent Bilinguals | Wilson |
| 02:00 PM-03:30 PM | 145 | Making Assessment More Meaningful | Bainbridge |
| 02:30 PM-03:30 PM | 149 | Utilizing A Teacher Alert System to Support Student Improvement on Science Practices | Lowrie |

Forensics**Tuesday**

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|-------------------|-----|---|--------|
| 11:30 AM-12:30 PM | 029 | Forensic Science: Inexpensive, Engaging, Fun Demos, Models and Activities | Lowrie |
| 10:00 AM-11:00 AM | 114 | Make Your Own Inexpensive Forensic Supplies | Lowrie |

I/G**Tuesday**

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|-------------------|-----|--|------------|
| 08:30 AM-09:30 AM | 003 | The Possibilities of Padlet When Designing Engaging Science Lessons in NGSS Grades 3-8 | Fitzgerald |
| 11:30 AM-12:30 PM | 027 | Reading, Writing, Talking, and DOING 3-dimensional Science: Literacy Strategies for K-6 Classrooms | Dod |
| 12:00 PM-01:00 PM | 033 | Surprises, Investigations, and Collaborations With Simple Materials | Carnahan |

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|-------------------|-----|--|------------|
| 12:00 PM-01:00 PM | 034 | Then and Now 1 | Henry |
| 01:00 PM-02:00 PM | 043 | OpenSciEd Professional Learning Community | Maclean |
| 02:00 PM-03:30 PM | 052 | From Drawings to Models: Using Systems and System Models to Construct Explanations for Phenomena | Carnahan |
| 02:30 PM-03:30 PM | 054 | Resource Center Teaching Strategies/With An Inclusion Twist | Fitzgerald |
| 02:30 PM-03:30 PM | 056 | Arachnophobia: The Most Dangerous and Most Unnecessary Fear | Maclean |

I/G

Wednesday

| | | | |
|-------------------|-----|---|----------|
| 08:30 AM-09:30 AM | 103 | STEM Activities for the Differentiated Middle School Classroom | Lowrie |
| 08:30 AM-09:30 AM | 106 | Let's Jam Out!: Exploring Phenomena Through Collaborative Digital Modeling | Rush |
| 10:30 AM-12:00 PM | 123 | Science Goes to the Movies: Exploring Themes and Techniques for a Variety of Curricula | Carnahan |
| 10:30 AM-12:00 PM | 124 | Data, Tables, Graphs, Oh My! Beginning Strategies to Bring Real-World Data Literacy into Classrooms | Mercer |
| 11:30 AM-12:30 PM | 128 | Then and Now 2 | Rush |

NGSS/NJSLS-S

Tuesday

| | | | |
|-------------------|-----|---|------------|
| 08:30 AM-09:30 AM | 006 | Planning 3D Assessment of Student Growth in Science Learning | Maclean |
| 08:30 AM-10:00 AM | 012 | Teach Data Better in Science: Unpack "Analyze & Interpret" | Bainbridge |
| 10:00 AM-11:00 AM | 018 | Using Phenomenon to Anchor a Lesson | Maclean |
| 10:00 AM-11:30 AM | 021 | Sensemaking and Productive Talk | Henry |
| 10:00 AM-11:30 AM | 022 | Using Inquiry to Investigate Misconceptions about COVID-19 Vaccines | Rush |
| 11:30 AM-12:30 PM | 030 | 3D Printing for a 1st Grade Audience | Maclean |

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|-------------------|-----|--|----------|
| 12:00 PM-01:00 PM | 033 | Surprises, Investigations, and Collaborations With Simple Materials | Carnahan |
| 01:30 PM-02:30 PM | 048 | How to Focus on Science and Literacy Skills in Grades 3-5 with Argument-Driven Inquiry | Wilson |
| 01:30 PM-03:00 PM | 049 | Teaching Science Through Issues to Increase Engagement, Meet the NGSS, and Prepare Citizens | Rush |
| 02:00 PM-03:30 PM | 052 | From Drawings to Models: Using Systems and System Models to Construct Explanations for Phenomena | Carnahan |

NGSS/NJSLS-S

Wednesday

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|-------------------|-----|---|-------------|
| 08:30 AM-09:30 AM | 107 | The Alliance for NJ Environmental Education, Come Join Us. | Wilson |
| 08:30 - 09:30 AM | 139 | Nature Notes : Nature Journaling is NGSS | Mercer |
| 08:30 AM-10:00 AM | 109 | Creating Learning Progressions | Bainbridge |
| 10:00 AM-11:00 AM | 113 | Integrating an Aviation & Aerospace Program into your School | Fitzgerald |
| 10:00 AM-11:30 AM | 117 | Diving Deep into Teaching and Learning about Climate Change | Henry |
| 10:00 AM-11:30 AM | 118 | Understanding Global Climate Change on Multiple Scales | Maclean |
| 11:30 AM-12:30 PM | 127 | Hello Science, Meet Creative Arts! | Lowrie |
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| 12:00 PM-01:30 PM | 134 | Teaching Climate Change in K-5 Classrooms | Maclean |
| 12:00 PM-01:30 PM | 135 | Claim, Evidence and Reasoning 2.0 | Nassau 24 |
| 01:00 PM-02:00 PM | 137 | Engaging Students in Understanding Weather | Dod |
| 01:00 PM-02:00 PM | 138 | Setting Teachers & Students Up for Success to Analyze & Interpret Data | Fitzgerald |
| 01:30 PM-02:30 PM | 142 | Integrating Problem Based Learning and Student Choice into High School Life Science Instruction | Henry |

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| 01:30 PM-02:30 PM | 143 | Plasma Physics and Fusion in the Classroom - Hot Topics Aligned to NGSS | Nassau 25 |
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| 01:30 PM-02:30 PM | 144 | Phenomena Based Learning in Science | Witherspoon |
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| 02:30 PM-03:30 PM | 152 | Middle School NJSLS-S Lessons That Really Work! | Wilson |
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P/PS

Tuesday

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|-------------------|-----|--------------------------|-----------|
| 08:30 AM-09:30 AM | 008 | Tricked into Thinking... | Nassau 24 |
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| 08:30 AM-09:30 AM | 010 | Argument-Driven Inquiry in the Life, Physical, and Earth-Space Sciences | Wilson |
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|-------------------|-----|----------------|-------|
| 12:00 PM-01:00 PM | 034 | Then and Now 1 | Henry |
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|-------------------|-----|---|-----|
| 01:00 PM-02:00 PM | 040 | Applying Mathematics in Science Inquiry to Deepen Understanding of Scientific Phenomena | Dod |
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P/PS

Wednesday

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|-------------------|-----|---|--------|
| 10:00 AM-11:00 AM | 114 | Make Your Own Inexpensive Forensic Supplies | Lowrie |
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| 10:00 AM-11:00 AM | 115 | Experience Kinematics: Using Real Data to Understand Motion | Rush |
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|-------------------|-----|--|-----------|
| 10:00 AM-11:30 AM | 119 | APS STEP UP: Evidence-Based Resources to Remove Barriers to Careers in Physics | Nassau 24 |
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|-------------------|-----|---|-----------|
| 10:30 AM-11:30 AM | 122 | Culturally Relevant Physics with "The New Normal" | Nassau 25 |
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|-------------------|-----|----------------|------|
| 11:30 AM-12:30 PM | 128 | Then and Now 2 | Rush |
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| 01:30 PM-02:30 PM | 143 | Plasma Physics and Fusion in the Classroom - Hot Topics Aligned to NGSS | Nassau 25 |
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|-------------------|-----|--|--------|
| 02:30 PM-03:30 PM | 150 | Investigating Alternative Energy Sources and Physical Science In A Hands On LEGO Education Adventure | Mercer |
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SL/SUP

Tuesday

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|-------------------|-----|---|------------|
| 01:00 PM-02:00 PM | 041 | Presidential Awards for Excellence in Mathematics and Science | Fitzgerald |
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| | | Teaching | |
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Tuesday

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|-------------------|-----|---|------------|
| 01:30 PM-02:30 PM | 047 | So You Want to be a Science Supervisor? | Nassau 24 |
| 02:00 PM-03:00 PM | 050 | Increasing Science Engagement Through Community Collaboration | Bainbridge |
| 02:30 PM-03:30 PM | 056 | Arachnophobia: The Most Dangerous and Most Unnecessary Fear | Maclean |
| 02:30 PM-03:30 PM | 058 | NJSTA Fall Membership Meeting | Nassau 25 |

SL/SUP

Wednesday

| | | | |
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| 10:00 AM-11:00 AM | 117 | Recruiting New STEM Teachers | Henry |
| 12:00 PM-01:00 PM | 132 | Laboratory Safety: Getting Back to Normal | Nassau 25 |
| 01:00 PM-02:00 PM | 138 | Setting Teachers & Students Up for Success to Analyze & Interpret Data | Fitzgerald |
| 01:00 PM-02:00 PM | 140 | Where Do I Go from Here? Career Development Options for Science Teachers who Aspire to Do More | Rush |
| 02:00 PM-03:30 PM | 147 | New Jersey Science Leadership Association Annual Meeting | Nassau 24 |

STEM/STEAM

Tuesday

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| 08:30 AM-10:00 AM | 013 | GLOBE Mission Earth: Fusing GLOBE with NASA Assets to Investigate Climate Change | Nassau 25 |
| 10:00 AM-11:00 AM | 020 | Initiatives to Find the Lost Einsteins - The Integration of Independent Scientific Research Projects | Nassau 24 |
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| 11:30 AM-01:00 PM | 032 | Innovations to Tackle the STEM Gap in Underserved Communities | Nassau 24 |
| 12:00 PM-01:00 PM | 035 | Building Data Skills through Polar Science | Nassau 25 |
| 01:00 PM-02:00 PM | 041 | Presidential Awards for Excellence in Mathematics and Science | Fitzgerald |

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|-------------------|-----|--|----------|
| | | Teaching | |
| 01:30 PM-02:30 PM | 045 | Proteins: The Star of the Show | Carnahan |
| 01:30 PM-02:30 PM | 048 | How to Focus on Science and Literacy Skills in Grades 3-5 with Argument-Driven Inquiry | Wilson |
| 02:30 PM-03:30 PM | 053 | Game On! Gamify Your Classroom and Student Learning | Dod |

STEM/STEAM

Wednesday

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| 08:30 AM-09:30 AM | 102 | Teaching New Jersey's Impacts from Climate Change Through Place-Based and Problem-Based Learning | Henry |
| 08:30 AM-09:30 AM | 103 | STEM Activities for the Differentiated Middle School Classroom | Lowrie |
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| 10:00 AM-11:30 AM | 120 | MISSION ONE: BRT (Bottle Rocket Transport) | Witherspoon |
| 11:30 AM-12:30 PM | 127 | Hello Science, Meet Creative Arts! | Lowrie |
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| 01:30 PM-02:30 PM | 144 | Phenomena Based Learning in Science | Witherspoon |
| 02:30 PM-03:30 PM | 150 | Investigating Alternative Energy Sources and Physical Science In A Hands On LEGO Education Adventure | Mercer |
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Tuesday

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| 08:30 AM-09:30 AM | 003 | The Possibilities of Padlet When Designing Engaging Science Lessons in NGSS Grades 3-8 | Fitzgerald |
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| 08:30 AM-09:30 AM | 008 | Tricked into Thinking... | Nassau 24 |
| 10:00 AM-11:30 AM | 014 | Equity and Engagement in Science | Carnahan |
| 12:00 PM-01:00 PM | 036 | Google Tips and Tricks for Science Teachers | Rush |
| 02:30 PM-03:30 PM | 053 | Game On! Gamify Your Classroom and Student Learning | Dod |

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Wednesday

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|-------------------|-----|---|--------|
| 11:30 AM-12:30 PM | 129 | Bringing Real Human Genetics Research into Your Classroom | Wilson |
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