

Thomas Jefferson National Accelerator Facility (Jefferson Lab)

Science Undergraduate Laboratory Internship (SULI) Program
Research Experience for Undergraduates (REU) Program
Mexican Physical Society (MPS) Program
Undergraduate Physics Research (UPR)

Tuesday, May 28, 2024, CEBAF Center Auditorium

- 7:45 a.m. Refreshments, L102/207
- 8:00 Introductions – Lisa Surles-Law and Jalyn Dio
- Jefferson Lab Overview Video
- Introduction to participating undergraduate programs at Jefferson Lab
- Objectives
 - Mentors and Research Projects
 - Scientific Journals
 - Mandatory Safety and Computer Training
 - Dress Code
 - Driving Regulations
 - Emergency Contact Information/Insurance Cards
- 8:45 Greetings – Stuart Henderson, Lab Director
- 9:00 Residence Facility Orientation – Melissa Hicks, RF Manager
- 9:15 Fostering a Positive and Respectful Workplace – Lisa Surles-Law & Tish Creery
- 10:15 *Break*
- 10:30 Computer Orientation and Security –Matthew Sconyers
- 11:15 Lunch (*On Your Own*)
- 12:15 SAF099 Safety Training – Steve Gagnon
- 2:15 SAF099 Testing
- 2:45 Badge ID Photos, **Badging Office**
- Microsoft Teams Walk-Through and Deliverable Overview, Jalyn Dio
- Research Project Report – Oral and Written
 - Summer Calendar & Paperwork
- 5:00 Depart

Wednesday, May 29, 2024, CEBAF Center Lobby

- 10:00 a.m. Meet Your Mentors

2024 JLab Summer Undergraduate Program Syllabus

Students are required to attend all activities in **RED**

All times are in Eastern Daylight Time (EDT)

Week 1: 28-31 May

T	28 May	08:00 AM	Program Orientation, CC Auditorium
W	29 May	10:00 AM	Meet with Mentors, CC Atrium
R	30 May	11:00 AM	Introduction to Nuclear Physics, CC F324/5, Mark Jones, Ph.D. (Research)
		03:00 PM	Annual Jefferson Lab Run Around, Meet Outside CC (1 mile Run/Walk)
F	31 May	12:00 PM	Brown Bag Lunch: Getting to Know You Social, SSC Classroom
		03:30 PM	Using a Reference Manager: Zotero, Jalyn Dio, Zoom

Week 2: 03-07 June

T	04 June	11:00 AM	Introduction to Accelerators, CC F324/5, Alex Bogacz, Ph.D. (Research)
W	05 June	10:30 AM	Mentor Project Show & Tell, SSC Classroom/Various Other Rooms
		12:00 PM	REU Lunch with Balša and Geoff, CC F107 (Req. for REU, Opt. CCI/MPS/SULI)
		01:00 PM	Department of Energy Office of Science Overview and History, Zoom
R	06 June	11:00 AM	Introduction to Detectors in Nuclear Physics, CC F324/5, Dave Mack
F	07 June	03:00 PM	TWS #1: Project Articulation & Scientific Journals, SSC Classroom

Please consider attending/volunteering for the 2024 Jefferson Lab Open House on Saturday, June 8th!

Week 3: 10-14 June

W	12 June	12:00 PM	Undergraduate Painting Lunch, SSC Classroom
		01:00 PM	Imposter Syndrome, Zoom , Maureen Zappala
R	13 June	11:00 AM	Nuclear Physics Detectors Applied to Medical and Biological Research Applications, CC F324/5, Drew Weisenberger, Ph.D. (Research)
F	14 June	03:00 PM	TWS #2: Rainbow Abstract (General/Long Abstract), Zoom

Week 4: 17-21 June

T	18 June	11:00 AM	CEBAF Overview, CC F113, Yves Roblin, Ph.D. (Research)
		01:00 PM	Values-Based Professionalism, Zoom
		03:00 PM	Roads to Success Panel, CC F113
W	19 June	Juneteenth – Holiday Observed	
R	20 June	11:00 AM	Nuclear Physics in Proton Radiotherapy, CC F324/5, Thia Keppel, Ph.D. (Research)
F	21 June	05:00 PM	AYCE Hot Pot and Korean BBQ, Hot Pot 757 & Korean BBQ (~\$30/person)

Week 5: 24-28 June

T	25 June	11:00 AM	Introduction to LQCD, Location TBA, Joe Karpie
		12:30 PM	Ice Skating, Chilled Ponds at Yorktown Ice Sports Complex (\$15/person)
W	26 June	01:00 PM	Mental Health, Zoom , Daniel Allen
R	27 June	11:00 AM	SRF Science and Technology, Location TBA, Eric Lechner

Events with Dates TBD:

- Lunch with Stuart, Director of Jefferson Lab
- Talk with Mike Epps, Department of Energy Project Manager

Refer to **Deliverable Due Dates** for deadlines and methods of file submission.

Required Events (TWS = Technical Writing Seminar) JLab Seminars, Department of Energy Seminars, Holidays, "Mandatory Fun" Events	Building Abbreviations: ARC – Applied Research Center, CC – CEBAF Center, SSC – Support Services Center
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Week 6: 01-05 July

M	01 July	11:30 AM	International Lunch Social with SciEd HS Interns, CC F113
T	02 July	11:00 AM	Scintillator and Photomultipliers, CC F113, Mark Dalton, Ph.D. (Research)
		03:00 PM	TWS #3: Undergraduate/High School Student Project Share, SSC Classroom
W	03 July	12:00 PM	REU Lunch with Balša and Geoff, CC F107 (Req. for REU, Opt. CCI/MPS/SULI)
R	04 July		U.S.A. Independence Day – Holiday Observed
F	05 July	03:00 PM	TWS #4: HSSHP/Undergraduate Poster Overview with Jalyn, Zoom

Week 7: 08-12 July

T	09 July	11:00 AM	Data Acquisition, CC F113, David Abbott
W	10 July	10:00 AM	Women in Science Roundtable, SSC Classroom (RSVP Requested)
		01:00 PM	WDTS Program Alumni Panel, Zoom
R	11 July	11:00 AM	Calorimetry, CC F324/5, Eugene Chudakov, Ph.D. (Research)
F	12 July	03:00 PM	Abstract Peer Review, Zoom

Week 8: 15-19 July

T	16 July	11:00 AM	Guesstimation: Approximate Answers to Any Question, CC F113, Larry Weinstein, Ph.D (Research)
		01:00 PM	Summer Student Picnic, sponsored by JSA GSPDA, CC Cafeteria
		03:00 PM	Poster Peer Review #1, SSC Classroom
W	17 July	12:00 PM	REU Lunch with Balša and Geoff, CC F107 (Req. for REU, Opt. CCI/MPS/SULI)
		01:00 PM	Careers for Community College Students, Zoom
R	18 July	11:00 AM	Extreme Vacuum, CC L102, Marcy Stutzman (Research)
		01:00 PM	WDTS Virtual Graduate School Fair, Registration Required
F	19 July	03:00 PM	Poster Peer Review #2, Zoom

Week 9: 22-26 July

T	23 July	11:00 AM	Ethics in Research, CC F113, Gail Dodge, Ph.D. (Research)
R	25 July	11:00 AM	An Overview of the DOE National Labs, CC L102, Douglas Higinbotham, Ph.D. (Research)
		01:00 PM	Lab Directors Panel, Zoom
F	26 July	ALL DAY	REU Final Presentations and Old Dominion University Tour (Req. for REU, Opt. CCI/MPS/SULI)

Week 10: 29 July – 02 August

T	30 July	11:00 AM	CEBAF Polarized Electron Source, CC F113, Riad Suleiman, Ph.D. (Research)
W	31 July	12:00 PM	REU Lunch with Balša and Geoff, CC F107 (Req. for REU, Opt. CCI/MPS/SULI)
F	02 Aug	11:45 AM	Summer Intern Poster Session, CC Atrium
		02:30 PM	Student Intern Exit Interviews with Lisa, SSC Classroom

Required Events (TWS = Technical Writing Seminar)
JLab Seminars, Department of Energy Seminars,
Holidays, "Mandatory Fun" Events

Building Abbreviations:

ARC – Applied Research Center, CC – CEBAF Center,
 SSC – Support Services Center

Jefferson Lab Undergraduate Internship Programs
Summer 2024 SULI
Deliverable Due Date Guide - DRAFT

Week	Due	Task	Link
2	07 JUN 4:30 PM	TWS 1: Project Articulation Form	TWS 1 Form
2	07 JUN 5:00 PM	WDTS SULI Pre-Survey	SULI WDTS
6	01 JUL 5:00 PM	HS/Undergrad Project Share Optional Slide <i>One slide max, supporting graphic for 1-2 min project elevator-pitch</i>	SciEd D. Form
7	10 JUL 12:00 PM	Draft of Long (Rainbow) Abstract <i>Refer to Abstract Reference Documents for appropriate color coding AND properly formatted header. Results not expected, but inferences based on potential results are requested. Ex: If this happens... then we can conclude...</i>	SciEd D. Form
8	15 JUL 12:00 PM	Rainbow Abstract Peer Review One Drive Comments <i>Comment on documents for each student in OneDrive group</i>	OneDrive
8	15 JUL 12:00 PM	Rainbow Abstract Peer Review Feedback Form <i>Submit Peer Review Feedback Form for each student in OneDrive group</i>	Feedback Form (A)
8	19 JUL 12:00 PM	Poster Draft for Poster Peer Review 2 <i>Submit Poster Draft that you plan on presenting during Poster Peer Review 2 (should include edits made after Poster Peer Review 1)</i>	SciEd D. Form
9	22 JUL 12:00 PM	Poster Peer Review Feedback <i>Submit Form for each student in Peer Review 2 Group</i>	Feedback Form (P)
10	30 JUL 12:00 PM	Final Poster (HARD DEADLINE) <i>Submit by this time to ensure completion before poster session. YOU are responsible for picking up from TED Room 55-2525 after completion.</i>	SciEd D. Form
10	01 AUG 11:59 PM	Research Report Paper – (Cover Sheet w/ Mentor Signature) <i>1500 to 3000-word research report paper in American Institutes of Physics publication form. Word count not inclusive of footnotes, appendices, or bibliography. Appendices must be three pages or less.</i>	SciEd D. Form
10	02 AUG 11:30 AM	General Audience (Long) Abstract <i>Final “Rainbow” abstract WITHOUT any color coding</i>	SciEd D. Form
10	02 AUG 11:30 AM	Short Abstract <i>150-word abstract summarizing poster’s content and final content used in presentation of poster</i>	SciEd D. Form
10	02 AUG 11:30 AM	WDTS Uploads <i>Final Poster w/ Short Abstract, Research Report, General Audience Abstract, & Poster Peer Review Document (see email from Jalyn)</i>	SULI WDTS
10	02 AUG 11:30 AM	WDTS Post Survey	SULI WDTS
10	02 AUG 11:30 AM	SciEd Exit Survey	Feedback Form (E)

FYI... 12:00 PM = NOON



Jefferson Lab's Summer Intern Dress Code

We have learned that student dress sets the tone for the learning environment. To clarify policy and to avoid questions, more specific descriptions of appropriate work attire are listed below.

The following dress practices are NOT allowed in Science Education Programs:

1. Pants worn below intended waistline, pants worn inside out, gym-type shorts, boxer pants, biker pants, bathing suit-type shorts, any type of cut-off shorts, cut-up pants.
2. Shirts or T-shirts over hose or stretch pants. Dresses, skirts, shorts, or tops covering stretch pants that do not reach at least midway to the thigh (fingertip length).
3. Bare feet or flip-flops. Shoes must be worn, keeping in mind safety concerns.
4. Shirts and blouses with objectionable slogans or obscenities.
5. Tank tops, shirts with spaghetti straps or shirts with uncovered sleeves less than 1-inch wide.
6. Sweat or yoga pants.

As a professional in the workplace,

- Hats are to be removed upon entering the buildings.
- Sunglasses are to be removed upon entering the buildings.

When working with machinery, follow all machine-specific instructions and be aware of:

- body piercing that will create safety hazard.
- loose clothing and loose lanyards.
- long hair. Tie back for safety.

Final decisions on the above dress practices are at the discretion of the Education Manager.



Jefferson Lab's Undergraduate Summer Intern Program Agreement of Expectations

In order to fully participate in the 2024 Undergraduate Summer Intern Programs of the Science Education Department at Thomas Jefferson National Accelerator Facility, the following expectations must be met:

- Complete the program beginning **Tuesday, May 28, 2024**, and concluding **Friday, August 2, 2024**.
- Work the daily schedule that is outlined during orientation. If, for some reason, you are unable to participate on a particular day, advanced notice to the Science Education Coordinator and Mentor is required via email.
- Be accessible to mentors during the agreed upon work schedule.
- Be accessible to collaborate with team members during agreed-upon hours.
- Complete all safety training mandated by Jefferson Lab staff.
- Participate in the Abstract Peer Review Session to be held on **July 12, 2024**.
- Participate in Poster Peer Review Sessions on **July 16, 2024**, and **July 19, 2024**.
- Submit the signed research paper to Mentor and to the Science Education program coordinator by **Thursday, August 1, 2024**.
- Participate in the Poster Presentation Sessions to be held on **Friday, August 2, 2024**.
- Adhere to the dress code and videoconference etiquette described during orientation for videoconference attendance. Refer to the *Jefferson Lab's Summer Intern Dress Code* document.
- Attend all mandatory Technical Writing Seminars for papers and posters. [Dates: **07, 14, 29 June AND 05 July**]. If extenuating circumstances arise, contact Lisa Surles-Law or Jalyn Dio before your absence.
- Attend all required events and guest speaking engagements, rf. to the *2024 Undergraduate Syllabus* document. If extenuating circumstances arise, contact Lisa Surles-Law or Jalyn Dio before your absence.
- If residing at or visiting the Residence Facility, adhere to all Residence Facility policies and procedures.
- Adhere to the Fostering a Positive and Respectful Workplace Guidelines.

I have read the "Jefferson Lab's Undergraduate Summer Intern Program Agreement of Expectations" (revised 05/10/2024) and understand my responsibilities and involvement in the Program. Failure to comply with all of the above expectations will result in the loss of my position in the Jefferson Lab Summer Undergraduate Internship Programs. I also understand that I am responsible for the payment of any taxes due from my stipend checks to the IRS.

Student Name
(Printed)

Signature

Date

Mentor Name
(Printed)

Signature

Date

Timeline

Week 1

- *This may be your student's first job...*
- Provide project-related background materials
- Review expectations on working time/availability
- Work Sensitivity

Week 2

- Provide guidance while establishing structure and routines
- Establish a regular pattern of communication, adjusting if necessary
- **Community Building/Engagement**

Week 3-8

- Set SMART Goals per week
 - Specific, Measurable, Attainable, Realistic, Timely
- Encourage your intern to use all tools provided
- Provide Feedback! It is **essential** for growth.

Week 9-10

- Ensure that deliverables are reviewed in some way prior to submission.
- Annual Public Poster Session
 - Friday, August 2nd
 - CEBAF Atrium
 - 11:45 AM - 1:15 PM

Exit

- Provide contact information to remain in touch with student after departure, if desired
- Ensure that you both complete the respective Mentor and Intern Exit Surveys to provide feedback for next year's programs



Jefferson Lab

Stay in the Loop.

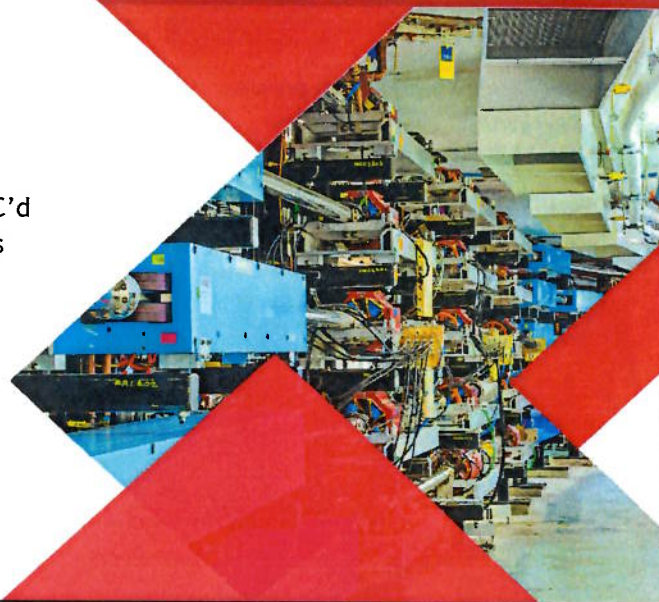
Weekly Infographics

- Sent to all interns by Friday of week prior, Mentors CC'd
- All events, locations, speakers, links, and deliverables

Outlook Calendar

Email or Microsoft Teams

- Lisa Surles-Law, SciEd Manager (surles@jlab.org)
- Jalyn Dio, SciEd Admin Support (jdio@jlab.org)
- Rhonda Bell, SciEd Administrator (rbell@jlab.org)



Provided Undergraduate Orientation Materials

Undergraduate Roster

Lists all students in undergraduate internship programs, academic backgrounds, and mentor assignments.

Summer 2024 Syllabus

Contains a schedule of events (required and optional) for the entire ten-week period.

Sensitive to change throughout summer

Deliverable Due Date Guide

Contains all expected student deliverables throughout the term, including a brief description, due date, and submission process.

SciEd Summer Intern Dress Code

*Specifies acceptable, appropriate dress for all summer interns (high school and undergraduate)
Enforced by mentors and SciEd*

Community Standards

Lab-wide policy of appropriate conduct for all employees, users, students, guests, visitors, and subcontractors

Agreement of Expectations

Science Education Expectations specifying the terms of the internship and intern requirements to remain in good standing.

Mentor Project Show and Tell

Wednesday, June 5, 2024 at 10:30 AM in SSC

Meeting first in SSC Classroom to discuss format and room assignments

- Groups of ~ 10 students grouped by mentor/department
- Mentors take turns sharing about their students' projects
 - About 2-3 mins, 0-2 slides per presentation (please bring slides on flash drive)
- Various rooms reserved in SSC with PowerPoint capabilities in each