2017 NCSSM ACCELERATOR HANDBOOK

A summer program that propels learning and expands horizons

Get ready for something different this summer. Through your participation in the Accelerator program, you will learn and grow in all new ways. The Summer Accelerator experience takes place at the Durham, NC, campus of North Carolina School of Science and Mathematics (NCSSM), a residential high school.

This handbook is your guide for what to expect, what to pack, our policies and our procedures. Email summer@ncssm.edu with any questions or call Jen Hill at (919) 416-2635.

Accelerator Mission

The North Carolina School of Science and Mathematics is the nation’s first publicly funded residential school to offer a specialized curriculum in science and mathematics. On the Durham campus, NCSSM educates academically and intellectually gifted high school juniors and seniors from across the state. The school serves hundreds more North Carolina students through online courses and interactive videoconferencing courses.

The goal of North Carolina School of Science and Mathematics summer programs, consistent with the school’s mission, is to provide rigorous, high-quality programs for academically talented participants from a wide range of backgrounds.

Contact Information

Parents can reach the on-call Summer Programs staff 24 hours a day while their students are on campus by calling (931) 771-3076.

Emergency calls can be directed to the Office of Campus Resources, (919) 416-2711. On campus, call (919) 416-2711 or the Student Life Main Desk, ext. 2825.
Emergency calls while participants are in their dorm should be directed to the Student Life Instructor offices:

Bryan: (919) 416-2825
Hunt: (919) 416-2826
Hill: (919) 416-2827
Royall (919) 416-2921

**Summer Programs Coordinator**

Jen Hill is NCSSM’s lead for all summer programs. A year-round member of the faculty, she is on hand to communicate with families of the participants. You can reach her by email, summer@ncssm.edu, by office phone (919) 416-2635, or on her cell phone, (919) 864-0293.

**Assistant Summer Programs Coordinator**

In 2017, Julia Fiore joined the Summer Office as a year-round coordinator. You can reach her by phone at (919) 416-2969.

**Instructors and Staff**

**Instructors**

NCSSM instructors developed the Accelerator courses based on their experience teaching these topics to high school participants year round. Their expertise in the field, combined with their particular experience in instructing young adults is a cornerstone of the Accelerator program.

**June 12 - June 23 online; June 25 - June 30 on Durham campus**

- [Advanced Cloning Lab](#) | Dr. Amanda Martyn, instructor of science
- [Epigenetics: How Genes Change](#) | Megan Aldrup-MacDonald, instructor of biology
- [Make Up Your MINDSET: Math for Decision-Making](#) | William Hall, instructor of mathematics

**June 12 - June 23 online; June 25 - June 30 on Brevard College campus**

*These courses will take place on the campus of Brevard College in Brevard, NC. Our*
faculty and summer staff will conduct the same program in Brevard while utilizing the various resources that campus and town have to offer.

- **Breaking Reality: The Utility of Games in the Virtual and Physical World** | Jason Lineberger, instructor of technology
- **Radio Telescope Astronomy and Cosmic Waves** | Charlie Payne, instructor of science

**July 3 - July 14 online; July 16 - July 21 on Durham campus**

- **Advanced Cloning Lab** | Dr. Amanda Martyn, instructor of science
- **Cracking the Code: Programming for Cryptography** | Taylor Gibson, instructor of mathematics
- **Epigenetics: How Genes Change** | Megan Aldrup-MacDonald, instructor of biology
- **Game Design and Programming: Learning to Code Games** | Charlie Payne, instructor of Physics
- **Mechatronics** | Dr. Joe LoBuglio, instructor of engineering
- **Neuroscience Research Methods** | Dr. Ashton Powell, instructor of biology

**July 10 - July 21 online; July 23 - July 28 on Durham campus**

- **Aerospace Engineering: Rocketry** | Dr. Joe LoBuglio, instructor of engineering
- **Cracking the Code: Programming for Cryptography** | Taylor Gibson, instructor of mathematics
- **Food Science: Farm to Fork** | Meredith Murphy, instructor of humanities
- **Neuroscience Research Methods** | Dr. Ashton Powell, instructor of biology

**Summer Student Life Instructors (SLIs)**

Student Life Instructors, or SLIs, live in the residence halls and assume an *in loco parentis* or supervisory role of the students. SLIs are responsible for directing, guiding and supervising summer program participants, particularly in areas of non-academic development. The staff counsels participants on an individual and/or group basis, provides social and recreational opportunities, sets guidelines for acceptable behavior, interprets and enforces NCSSM policies, responds to problems and conflicts and administers discipline when necessary.

**Student Life Lead and Junior Counselors**

In addition to the SLIs, NCSSM students and alumni are chosen for demonstrated leadership qualities to serve as summer program counselors. Counselors assist with classroom activities, plan hall and evening activities and help supervise guidelines.
Counselor

Year-round counselor Scott Schwartz is responsible for reviewing forms, supporting families with their preparation for the program, and will be available to participants in the evenings. He will lead courses on SAT and ACT prep and be available some afternoons and evenings for college and career counseling services on the Durham campus and by phone for those in Brevard.

Arrival, Final Presentations and Departure

Getting to Campus

**Durham check in and drop off point** - Park in Bryan parking lot at Club and Ninth Street entrance. Enter in to Bryan Lobby.

**Brevard College check in and drop off point** - One Brevard College Drive, Brevard, NC 28712. Specific parking and entrance instructions TBA.

Residential Students

Residential participants (student who are registered to stay overnight) may arrive by any means of transport, but they must indicate mode of arrival on the forms submitted prior to arrival. If a participant is arriving by train or bus, he or she will be picked up at the Durham station at 515 West Pettigrew, or at the nearest bus station to Brevard in Hendersonville. If a participant is arriving to the Durham campus by plane, he or she will be met by baggage claim with a sign with the participant’s name on it at the Raleigh-Durham International Airport (RDU), just 15 minutes from NCSSM's Durham campus.

Day Only Students

*We welcome day students to join us on Sunday evening for the tour and get-to-know-you games from 4pm to 8pm. Day only students are encouraged to join us, though attendance is not required, We will expect you, please let us know in advance if you will not be in attendance.*

*Day students must be dropped off every day by 9:25 a.m. They must be taken to the front desk to sign in and then will proceed to class. They will report to the front desk at 4:30 where a parent or pre-arranged guardian will come inside and pick them up, checking out when they do.*

Arrival Day

Participants should arrive on Sunday between 1:30 - 3:30 p.m. at Bryan Lobby. At the registration desk, students will receive room information, access passes, and a quick
introduction to the NCSSM campus. IT will be on hand to get each student connected to the internet. Parents can join their student in getting settled and then are free to leave campus. *Day Only Students - we welcome day students to join us on Sunday evening for the tour and get-to-know-you games from 4 p.m. to 8 p.m. Day only students are encouraged to join us, though attendance is not required. We will expect you, please let us know in advance if you will not be in attendance.

At 4 p.m., students will take a tour of the campus, then dinner from 5p.m. to 6p.m. followed by get to know you games from 6p.m. to 7p.m. and a Welcome Session led by a faculty member or Dean.

Unaccompanied Minor Status

Each airline, bus, or train has its own policy about unaccompanied minors. Check with each airline carrier for their specific policy. Please contact Jen Hill at (919) 416-2635 for any assistance with minors traveling.

- Amtrak - Children 13, 14 and 15 years old may travel unaccompanied in accordance with the Amtrak Unaccompanied Minor Policy.
- Most airlines - Children ages 12 to 17 can pay the service charge to use the unaccompanied minor service for flights where allowed, or they can travel as adults.
- Greyhound - Passengers between the ages of 8 and 14 years may travel unaccompanied at full adult fare if a series of conditions are met such as no transfers, no longer than 5 hours travel time, no travel during the evening hours and that they are accompanied by a designated adult until they board the bus and when they arrive. Please review all the conditions on their website.

Final Presentations and Departure

We invite parents and family to join us at 1 p.m. on Friday for presentations. This summer, each course will present their work at 1pm. After your course’s presentation, we invite you and your family to visit the instructors of the other courses. Until 3 p.m., students and their families will have the option to sit in on presentations from the other courses.

Participants may be picked up by their parents or a designated adult or return in their own car. If departing via bus, train or airplane, please notify Jen Hill at summer@ncssm.edu in advance of arrival so that we may schedule NCSSM staff to accompany the participant to the bus station, train station or airport. NCSSM staff will take participants to local Durham bus stations and/or the Raleigh-Durham International Airport (RDU).
Academic Life

Instructors

NCSSM instructors developed the Accelerator courses based on their experience teaching these topics to high school participants year-round. Their expertise in the field, combined with their particular experience in instructing young adults is a cornerstone of the Accelerator program. Instructors will be in communication with participants beginning two weeks before the start of their course with instructions on what to expect.

Coursework

The online component typically comprises 15 hours of work before and/or after the residential portion of the course. This time includes: time for students to introduce themselves and share common interests (which can help build the cohort before they arrive on campus), and time for readings, discussions, video content, reflection questions, inquiry and/or data collection.

Teachers may elect to have students complete a capstone project after the residential session, continue working on a project developed during the session or record audio or video presenting their projects or reflections upon conclusion of the residential session.

Course instructors will send participants specific instructions by the end of the first day of the online component of the course. In order to prepare, participants should make sure to have computer and internet access for at least 7 hours during each of the weeks of the online portion and have the ability to check email for instructions.

Following the online work, each course consists of 4.5 days of in-person instruction and study. Requirements range depending on the instructor and topic, but each is a blend of hands-on experience, group work, research and lectures.

Evaluation & Certificate

Each student will be evaluated at the end of his or her course by the instructor. Those individual evaluations, including a pass or fail and a participation evaluation and a course summary, will be shared with the student and his or her parent/guardian by at the end of the summer by email and as a printed letter along with the certificate.

Participants who complete the course will receive a certificate demonstrating that they participated in an academic course through NCSSM. Participants can take the evaluation and certificate to their high school to seek credit and can choose to use it for college applications. These courses do not have a school power code. While NCSSM cannot guarantee that a school will honor the certificate or provide credit for the course, we are happy to provide schools with information they request.
Sample Schedule, Typical Weekday

7:30 a.m. - 9:00 a.m. Breakfast available in cafeteria
8:50 a.m. Day students dropped off in Bryan Lobby
9:00 a.m. - 11:30 a.m. Class
11:30 a.m. - 12:30 p.m. Lunch available in cafeteria (day students stay for lunch)
12:30 p.m. - 4:30 p.m. Class
4:30 p.m. Day students are picked up at Bryan Lobby
4:30 p.m. - 6:00 p.m. Dinner available in cafeteria
5:30 p.m. - 10:30 p.m. Evening activities (Durham Bulls game, magician, trip to the planetarium, etc.)
10:30 p.m. In-building curfew
10:30 p.m. - 11:30 p.m. Evening activity
12:00 p.m. In-room curfew

Residential Life

Evening and Off-Campus Activities

Both scheduled activities and free time are offered every evening. We provide students with a comprehensive array of evening activities. On some evenings, students have activities to choose between, including the choice of down time. On other evenings, we venture with the whole group to the Planetarium or invite a magician to perform for everyone. All excursions are included in the cost of tuition. Any extras, such as souvenirs or extra food, must be covered by the student. Free time can be used for studying, communicating with family, spending time on campus with fellow participants, or relaxing.

Housing

Participants will be assigned a double-occupancy room in one of NCSSM’s campus dormitories. Housing and roommate assignments will be provided to students when they arrive on campus.
Upon arrival, participants will check in at the registration tables in Bryan Lobby where they will be issued room keys and access passes for use during their stay at NCSSM. The room key and access pass must be returned at the end of the program. Lost access passes and room keys must be immediately reported to a Campus Resources and Security Officer. The Director of Campus Resources provides replacements for access passes and lost or broken keys. The charge for lost access passes or keys is $50.

**Meals**

Breakfast, lunch, dinner, and a snack will be provided in the school’s cafeteria each day, Sunday through Friday. The busy Accelerator schedule does not allow for students to leave campus during mealtimes. The NCSSM cafeteria is open during the following times each day that students are in residence:

- 7:30 a.m. - 9:00 a.m.  Breakfast
- 11:30 a.m. - 1:00 p.m.  Lunch
- 4:30 p.m. - 6:00 p.m.  Dinner

We provide additional snacks that are delivered in the afternoon to each class and are also available for purchase in the NCSSM School Store. Several vending machines are located throughout campus. Students are also welcome to bring snacks or favorite foods with them.

**Campus Facilities**

**Mail Service**

Participant mail is delivered to the Summer Coordinator and then distributed to instructors during class time. Participant mail and packages may be sent to the following address:

- Durham campus programs - *Name of participant* | c/o Summer Accelerator ETC | 326 | North Carolina School of Science and Mathematics | 1219 Broad Street | Durham, NC 27705  
- Brevard College campus program - *Name of participant* | c/o Michael Cohen Summer Accelerator | Brevard College | One Brevard College Drive | Brevard, NC 28712

Because participants are only on campus for one week, please be aware of delivery times.
Visitors

All visitors must check in at the front desk in the Bryan Lobby. Participants may only meet with visitors during the free time indicated on their program schedules. Participants must indicate if they will have visitors in the forms they fill out before the program begins. All visitors must be approved by the participant’s parents and the Summer Programs Coordinator must be notified.

Internet

Wireless internet is available in all areas of campus, including residential halls, classrooms, offices and external grounds. All participants enrolled in NCSSM summer programs must abide by the NCSSM Network Usage Agreement and Acceptable Use Policy. Wireless internet access is unavailable after 1 a.m. each night. Participants may contact NCSSM tech support at http://www.ncssm.edu/help.

School Store

Durham's school store sells NCSSM clothing and gifts. It also sells snacks, small electronics and sundries. The summer hours will be posted outside the store and these items are available for purchase online at https://www.ncssm.edu/store.

Laundry

Participants have access to laundry facilities in the residence halls and will receive instructions for using the washers and dryers. The washing cycle is $1.00 and the drying cycle is $1.00. Please pack or purchase detergent at the school store.

Participant Health and Safety

Taking Medication

Participants must report all prescription medications on the Health History Questionnaire, Form A. Participants are allowed to bring on campus only the amount of prescription medications needed for six (6) days. Medications in excess of a six-day supply must be turned in to the SLI who will account for medications upon arrival. All narcotics must be handed in to the SLIs who will give to participants when needed and directed by the parents and student.

Participants who bring and do not report more than a six-day supply of their prescription medication will be immediately removed from the program. Participants may keep over-the-counter medications in their rooms for their personal use (i.e. pain relievers, cold medications, stomach remedies, herbal remedies, vitamins, etc.). NCSSM assumes no responsibility for the use or misuse of such medications.
Health Services

If a participant becomes ill while on NCSSM’s campus, the participant should report their symptoms to a SLI who will provide support. More serious problems may require a visit to a local urgent care or hospital emergency room. Every effort will be made to contact the parent/guardian prior to transporting.

Participant Expectations and Policies

Code of Conduct

North Carolina School of Science and Mathematics is one of the most prestigious residential high schools in the country. The academic opportunities available provide a unique and exciting learning experience, enhancing participants’ intellectual and social growth while connecting them to a dynamic network of future leaders in science, mathematics, technology and manufacturing, government, the arts and other fields. Opportunities and challenges abound, allowing for the gifted and enthusiastic people—both students and faculty—associated with the school to excel. Each day at NCSSM provides ample evidence that the NCSSM community is poised to change the world.

Participants selected to attend the North Carolina School of Science and Mathematics bring with them a variety of backgrounds and expectations. The school is committed to working cooperatively with participants and their parents to create a positive, supportive and intellectually stimulating environment. A major goal of NCSSM is enabling participants to live independently. NCSSM offers many opportunities for participants to grow as individuals, and they will have many opportunities for greater personal responsibility. With the increase in freedom comes the challenge of making positive decisions.

The NCSSM Code of Participant Conduct exists to guide and inspire the entire community’s decision-making process. This code provides participants, parents/guardians, school employees and the public with expectations for community behavior. All participants are responsible for conducting themselves in a manner that helps enhance an environment of learning in which the rights, dignity, worth and freedom of each member of the academic community are respected. The NCSSM Code of Participant Conduct is the commitment to follow the fundamental principles of integrity, responsibility and respect. As community members, participants agree at all times to be honest, kind and respectful of people, property and the free exchange of ideas.

Academic Honesty

Participants are responsible for understanding what style of assignment preparation is acceptable to the instructor, and when and if collaboration is allowed. Participants are expected to act in an ethical and honorable manner at all times. All work turned in by a
participant should be the result of his or her own efforts unless otherwise instructed. For essays and research assignments, participants must cite all sources for ideas that are not their own. For a guide to citing sources and avoiding plagiarism, see the NCSSM Writing Program webpage (www.dlt.ncssm.edu/write_prog).

**Dress Code**

The school expects that participant dress be neat, clean and appropriate for the occasion. Shoes are required in all areas of the campus except in participants’ assigned residence halls. Participants are expected to dress appropriately while on hall. Sunbathing is permitted only in the grassy area between Beall and Reynolds, the Reynolds courtyard and the swing set area. Participants are expected to wear cover-ups and shoes as they travel to and from sunbathing areas.

**Social Discipline**

NCSSM is a residential environment that is open to participants, staff, parents and visitors. While we expect that participants may sometimes display affection, we also expect that the display will not exceed appropriate limits.

**Curfews**

The following guidelines have been established with the intent of providing an atmosphere conducive to self-directed learning and study for all participants.

- 10:30 p.m. In-building curfew
- 12:00 p.m. In-room curfew

**Phones and Personal Electronics**

Cell phones must be turned off when on an academic floor or in an academic setting, including the auditorium, lecture halls, library, conference rooms and in Counseling Services.

- No participant telephone use, either cellular or otherwise, is allowed after 1 a.m.
- Cell phone users should respect others in the community by stepping out of a social setting when taking or making calls.
- Violation of these guidelines will result in the minimum penalty of the loss of cellular phone use.

**Textbooks**

Although textbooks at NCSSM are provided for participant use free of charge, lost, damaged or stolen books are each participant's financial responsibility.
Laptops in the Classroom

Participants are encouraged to use laptop computers for appropriate academic purposes in the classroom. However, such distracting activities as web browsing, checking email or instant messaging are specifically prohibited.

Damages and Charges

Each participant in NCSSM Summer Programs shall be responsible for any damage he or she may cause to property owned by the North Carolina School of Science and Mathematics. Should a participant cause any damage to school-owned property, NCSSM will charge the participant’s parent or guardian an amount to cover the costs of repair or replacement.

Disciplinary Procedures

Any member of the NCSSM community who witnesses an incident that violates the above fundamental principles has the right and the responsibility to address that behavior. No written document can provide for all circumstances; therefore, the exercise of discretion and good judgment is expected. The primary consideration in each decision must be, “What is best for the community?”

Prohibited Activities

NCSSM is a residential academic community that must be drug-, alcohol-, tobacco- and weapon-free. Participants who engage in the following actions will be immediately dismissed from NCSSM: distributing illegal or prescription drugs or medications, alcohol, or tobacco products or engaging in any sexual activity or act of violence.

At our discretion, participants who engage in the following activities will be dismissed immediately: activities in conflict to the Code of Conduct, accessing one’s car, leaving campus, being in possession of prescription medications beyond the amount prescribed by doctor for 6 days, or engaging in sexual activity.

Dismissal from NCSSM Summer Programs

If any faculty, staff or community member witnesses or is made aware of any serious violation(s) of the Code of Conduct, including, but not limited to possession, trafficking and/or use of drugs or alcohol; possession or use of a weapon; use or possession of alcohol; or behavior which threatens the safety of a participant, staff member or property, the school administration may immediately dismiss the participant. Upon dismissal, it will be the responsibility of the family to make arrangements for the participant to leave campus as soon as possible. Participants and parent(s) acknowledge that if a participant is dismissed or departs for any reason, no refunds can be granted. Further, the family is responsible for any and all costs of early departure whether for medical reasons, dismissal, personal emergencies or otherwise.
In the event that a participant is sent home early, parent(s) should understand that participants leaving for any reason may not be accompanied by staff on any of their trip home. In addition, if parent(s) cannot be reached when and if their teen returns home early, the Emergency Contact Person designated by your forms will be contacted for notification and communication purposes.

**Non-discrimination policy**

In administering its affairs, the North Carolina School of Science and Mathematics is committed to equality of opportunity. It is the policy of the school to be fair and impartial in all its relations with its students, participants, employees and applicants for employment and to not discriminate against any person on the basis of race, color, creed, national origin, gender identification, sexual orientation, religion, disability, age or honorable service in the armed services of the United States.

**Accelerator Packing Checklist**

- Laptop - Participants are required to bring a laptop. If the student indicated on their registration that they require a loaner, we will provide one for them. Please contact [summer@ncssm.edu](mailto:summer@ncssm.edu) if you feel you need to borrow a laptop and did not indicate that on your application.
- Reading material
- Notebook, pens, and pencils
- Calculator (in courses where a graphing calculator is required, we will provide one for you)
- Book bag

**Dorm Items**

- Hand soap
- Personal grooming items
- Twin sized sheets
- Pillow and pillowcase, blanket or comforter
- Towels and washcloths
- Small electric fan (If you would like. The rooms are air conditioned)
- Toiletries, soap
- Alarm clock
- Shower shoes
- Hangers
- Snacks

**Medicine**

- Provide information about prescription medicine on the Summer Contact Form
- Small amounts of over-the-counter medicine (ibuprofen, Tylenol, sinus medicine)
Clothing

- Closed-toe shoes are required for lab or engineering course and certain activities
- Regular school day clothing
- Bathing suit
- Exercise/gym clothes and sneakers
- Sleepwear

Optional

- Personal water bottle
- Sunscreen, sunglasses
- Hat
- Camera

Things NOT to Bring

- **Electronics and valuable items.** NCSSM will not be responsible for loss of any items
- **Large amounts of money.** Participants will not leave campus unless part of an official activity, with expenses paid for, and all meals are provided.