Research Options

Recognizing the importance of technical and problem-solving skills and the increasing demand for research learning opportunities among our students, NCSSM offers four principal options for focused research. See the applicable section of the NCSSM Course Catalog for specific course descriptions, prerequisites, and other important information about these opportunities. Students who successfully complete one of the research sequences have their area of study and project title noted on the NCSSM transcript.

For the majority of our students with limited previous research involvement, Research Experience courses provide research skills development and the opportunity to complete a comprehensive research project in science, humanities, mathematics, or computer science. The sequence begins in the spring trimester of the junior year with an introductory course laying the groundwork for developing an appropriate project. That is followed by a completion course in the fall or winter trimester of the senior year where the project is implemented and findings presented.

Mentorship is for students who want to develop research skills as part of an opportunity to work in an off-campus lab or other real world setting with a research professional. Entry is by application to the Mentorship Coordinator, and the sequence begins in the spring trimester of the junior year with an explorations course designed to prepare students for the mentorship experience. That is followed in the fall and winter trimesters of the senior year with an off-campus mentorship, where students spend two full afternoons each week working on an independent project or as part of an ongoing project currently underway at an area university or in a Research Triangle Park lab under the guidance of one or more mentors.

More advanced courses in a specific scientific discipline—Research in Biology, Chemistry, Physics, or Computational Science—are for students who want to initiate or continue an in-depth research project of their own design. Entry is by application to the designated research instructor and requires permission of the Dean of Science. The sequence begins as early as the winter trimester of the junior year and continues up to four trimesters through the planning, investigation, analysis, and presentation of an original research concept or cutting edge idea. Students often participate in summer research programs on campus or in the Triangle area, and/or have the option of entering their work in state or national competitions.

Students earn a research credential in Mathematics by successfully completing a three trimester sequence in Statistics with Advanced Topics or an upper level course in Mathematical Modeling. Both options are project oriented, with students designing experiments to mathematically analyze real world problems, gathering and testing data then presenting their results. Entry is by permission of the Dean of Mathematics; students with a strong background in mathematics can begin the Statistics sequence in their junior year, while Mathematical Modeling is open only to seniors.

Each spring NCSSM showcases its student research programs in a Research Symposium, at which students present the results of their research activities through oral and/or poster presentations to the NCSSM community and invited guests. Interested juniors are encouraged to participate in additional research opportunities available during the summer break. NCSSM sponsored research programs are posted on the school’s information webpage (At A Glance), while outside research opportunities are made available through individual academic departments and the Counseling Services Office.
Special Study Options

**Individualized Study** is a contract between a student enrolled in a course in the regular curriculum and the instructor of that course, allowing students to move at their own pace and style through the course. The normal registration procedures and deadlines apply to the student’s enrollment in the course. Once the student is enrolled, an Individualized Study contract may be negotiated at any time the instructor and the student determine it is appropriate. Applications for Individualized Study are available in the Office of the Registrar. Course credit is earned for the successful completion of the course and applied to either graduation requirements in that discipline or to elective credit requirements, as appropriate.

Options for **Independent Study**, **Directed Study**, and **Seminar**-based study are available to students interested in such opportunities. These study options are subject to the availability of an NCSSM faculty member to serve as sponsor of the study, to meet regularly with the student(s) involved in the study, and to submit appropriate attendance, grade, and progress reports for the student(s) involved in the study. In some instances, the study may involve a non-faculty expert as resource person but this may not be to the exclusion of the regular attendance and integral involvement of the NCSSM faculty member. Application forms for these special study options, along with procedures and deadlines for registration, are published on At A Glance.

Students may not use Independent Study, Seminar, or Directed Study options toward core-subject or core-elective graduation requirements. Mentorship and approved distance education courses are counted as core-elective credit toward graduation. Graduation credit for Individualized Study is credited as for the regular course.

**Additional Opportunities for Academic Credit**

Prior approval of any of the following is required and is the responsibility of the NCSSM Academic Programs Office, in consultation with the appropriate Academic Dean(s):

- **Opportunity to complete an NCSSM course for credit in the Summer Academic Recovery Program** to earn credit for a course in which the student received a D and which is required for the student to return or graduate. If the Program is successfully completed, the D is replaced with a C-.

- **Opportunity to earn replacement credit for a course in which the student received a failing grade** when the student successfully completes another appropriate NCSSM course. Both the original grade of “D” or “U” and the new grade earned are part of the student’s record, are displayed on the transcript and, where appropriate, are computed as part of the GPA.

- **Opportunity to receive NCSSM credit for a course from another institution when the course is similar in rigor to NCSSM courses, not available from NCSSM, and must be taken to meet a core graduation requirement.**

- **Opportunity to receive NCSSM credit for a course from another institution when the course is similar in rigor to NCSSM courses but not available from NCSSM; and if we deem the course to be essential to the student’s educational development to merit NCSSM credit.**

**Course Audit**

The instructor of any course may grant or withhold permission to audit. If an instructor permits a student to attend a class for which the student is not registered, the student is considered to be auditing the class. Students auditing a course cannot (1) use a place in the class needed for a student enrolling for credit, (2) earn credit for the course, or (3) have the course recorded on the transcript.
**Tutorials**
Each instructor is on duty at a specific time to provide tutorial assistance to students. Students in academic difficulty, in need of review, or in need of individualized help are encouraged to take advantage of these sessions. These times may be in the evening or during the class day. Each instructor informs the students in class when she/he will be available and posts information regarding his/her office hours and tutorial schedule in the Focus database.

**Advanced Placement Exams**
The Academic Programs Office coordinates Advanced Placement (AP) testing at NCSSM on the dates specified each year by the College Board. Only those AP Exams ordered in advance by students are administered. In December, students are requested to fill out an “Intent to take the AP Exam” form. They then complete an actual registration in January, and payment for all tests is required at that time.

**Refund Policy**: Students may receive a full refund if they cancel any exam prior to the ordering of all AP exams (typically in February). After exams have been ordered, only partial refunds may be available. To cancel an exam a student has registered and paid for, she/he must fill out the cancellation paperwork and refund request **TWO WEEKS PRIOR TO THE EXAM DATE**. If funds are available after all AP program costs are covered, students who completed the cancellation paperwork in a timely manner may receive a partial refund in June. The actual amount of any refund will not be determined until June, and will be less unused exam fees, processing charges and proctor charges. Any student, who misses an exam and has not completed cancellation paperwork prior to two weeks of the exam date, will not receive any kind of credit or refund.

Note: Exams must start on time. Any student arriving late to any exam may not be permitted to take the exam and will not receive a refund.