

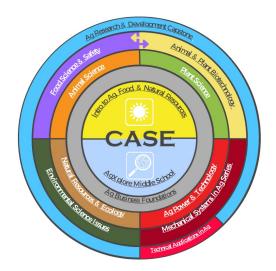
New Jersey CASE Grant FY23 Announcement and Application

Grant Application Deadline: Tuesday, March 1, 2023.

DESCRIPTION OF NJ CASE GRANT OPPORTUNITY

The FY23 NJ Department of Agriculture CASE Grants are <u>competitive</u>. Grants (up to \$5,000) will be awarded to schools implementing a CASE program of study and meeting 100% of NJ CASE eligibility requirements. Grant funds must be utilized by June 30, 2023 so all equipment, supplies and/or professional development is in place or completed for 2023-24 school year. Grant funding priorities include: 1) professional development provided at CASE Institutes, 2) equipment and supplies identified in the CASE purchase manual 3) facility upgrades and/or 4) travel to a CASE Institute. These priorities support 1) establishing new CASE programs and/or CASE pathways, 2) completing a CASE sequence of courses/pathway, and 3) supplementing previously funded CASE courses with equipment or facility needs.

See the diagram below or visit: <u>https://www.case4learning.org/curriculum/courses/</u>



The NJ CASE grants are subject to state funding. Accumulated points on applications will determine grantees. All FY23 NJ CASE grant funds awarded to local schools must be used to implement one or more of the available CASE courses, in a sequence, leading to a CASE program of study. NJ CASE grant funds shall be used only for the purchase of items (equipment/supplies) listed in the CASE Purchase Manual (which includes upgrades to class/lab facilities) and/or for teacher professional development at a 2023 CASE Institute (CI).

- CASE Purchase Manual: https://www.case4learning.org/purchasing-manuals (must have an account to view)
- CASE Institutes: <u>https://www.case4learning.org/get-certified/register-for-an-institute/</u> (registration will open January 5)

GRANT SUBMISSION RULES

- 1. Applicants must complete the "2023 CASE Grant Application" no later than 11:59 pm on March 1, 2023 (including all requested uploads).
- 2. The application can be accessed at this link: <u>https://form.jotform.com/NJFFA/NJCASEGRANT.</u>
- 3. No facsimiles or email copies will be accepted.

4. The online application cannot be saved and continued later. It is recommended that narrative components be typed in a word processing program and copied into the online application when ready to submit the application. It is also recommended to gather all required uploads prior to starting the application.

GRANT SUBMISSION CHECKLIST AND REQUIREMENTS

(Additional explanation for each section starts on page 6 of this document.)

- 1. Section I Grant Title Page
- 2. Section II CASE Course Selection
- 3. Section III CASE Grant Eligibility/Requirements (50 points)
- 4. Section IV Narrative (30 points)
- 5. Section V Budget detail (expenditures) (Purchase Manual Tabs or spreadsheet) (10 points)
- 6. Section VI Budget Summary Form (10 points)
- 7. Signature Page

GRANTEE FINAL REPORT EXPECTATIONS

Grantees will be sent a link to use for submitting the final report in the acceptance email. The following information will be requested:

- 1. Final Report Signature Page
- 2. Final Report Narrative
 - a. Describe the use of CASE grant funds for: 1) CASE Institute; 2) supplies and equipment; and/or 3) Facility.
 - b. Discuss sequence of courses and provide detail about the end of course CASE assessments.
 - c. Discuss articulation agreements: List student numbers, institutions offering credits, and CASE course names for which students will receive college credit.
 - d. Discuss results of CASE EoC Assessments compared to last year.
 - e. Provide other information deemed relevant to the success of the implementation of CASE.
- 3. Budget Detail Form Must reflect actual expenditures.
- 4. Budget Summary Final Report Form Summarize grant funds received/spent.
- 5. **CASE institute Certificate** For those attending a CASE Institute in 2023.
- 6. Photos Upload photos of students participating in CASE lessons at your school (by December 31, 2023)

CASE PROGRAM INFORMATION

The CASE Model

(excerpts below are from <u>www.case4learning.org</u>)

The Curriculum for Agricultural Science Education^m (CASE^m) project develops a structured sequence of agriculture courses and serves as a model for elevating the rigor and relevance of agricultural education.

CASE is much more than a curriculum. In fact, CASE is a system of instructional support for the classroom teacher like no other resource in agricultural education today. The CASE model provides four major areas of support to promote solid classroom instruction using rigorous and relevant lessons while enhancing student learning.



The four areas of teacher support include curriculum, professional development, assessment, and certification. Each area contributes to the validity of CASE instructional materials by ensuring that teachers are properly equipped and trained, and student learning is clearly accountable.

The CASE Learning Environment

The activity, project, and problem-based approach of CASE requires a well-equipped learning environment with internet access. The ideal CASE facilities include space or areas for science laboratories, computer-based learning, and student workspace. All materials are written for a class size of 20 students. For larger or smaller classes, please plan accordingly. Some schools utilize multiple years and multiple grants to build the equipment and supply list for 20 students.

See the "purchasing manuals" in the CASE Store on the CASE website: <u>https://www.case4learning.org/purchasing-manuals</u> (Must create a MyCASE account to access.)

Curriculum

CASE courses provide the teacher a comprehensive package of all teaching resources required to instruct lessons. Each lesson plan contains teacher notes, PowerPoint[®] presentations, student activity instructions, and assessments. Lessons are designed to provide everything the teacher needs at a click of the mouse. The philosophy behind a CASE lesson is to empower the student by providing students an active role in their learning rather than learning being a product of teacher-led instruction.

Professional Development

A CASE Institute (CI) is professional development that provides teachers training for the instruction related to a specific CASE course. Up to 80 hours of intense professional development at a CASE Institute is required for each CASE course certification. *Successful completion of the CASE Institute is required for this New Jersey CASE funding*. For more information about CIs, visit:

https://www.case4learning.org/get-certified/register-for-an-institute/

Assessment

CASE uses a blend of formative and summative assessment strategies. The curriculum is designed on the theory of spiraling student learning experiences by introducing new material and relating it to previously learned material to help the student understand the interconnectedness of the subject matter. CASE EoC assessments will be delivered via NOCTI, a third-party assessment agency. CASE EoC content is developed and aligned to CASE courses by independent contractors. <u>Subscriptions to CASE EoCs are purchased for all NJ CASE schools by NJDA, OFANRE in cooperation with NJDOE</u> regardless of being a recipient of this grant. More about EoCs can be found here https://www.case4learning.org/curriculum/eocs/.

Certification

The value of CASE is the overall certification of students, teachers, and programs. To ensure that high quality instructional experiences are provided to students, certification of teachers and programs is essential. Ensuring that teachers and programs are providing CASE instruction as designed is one measure of consistency for CASE learning goals across programs.

Programs that follow the CASE certification process and meet the certification requirements will provide their students a quality education and the maximum recognition for their efforts. Students may be eligible for college credit based upon meeting the certification requirements. As the program develops it is anticipated that CASE certification will influence student admission and scholarship potential for post-secondary education.

2023 CASE COURSES

CASE courses consist of a full year of lessons (150 days of 45-minute lessons) that utilize activity, project, and problem-based learning set in an inquiry-based, student-directed environment. CASE increases the rigor and relevance of agriculture subject matter and enhances core academic areas including science, mathematics, and English. CASE provides the teacher everything needed to facilitate classroom instruction except equipment and supplies, which can be provided by this grant or other funding. See the available courses below.



Introduction to Agriculture, Food, & Natural Resources (AFNR)

This is the first course for all CASE sequences. This course is intended to serve as the introductory course within the CASE Program of Study. The course is structured to enable all students to have a variety of experiences that will provide an overview of the fields of agricultural science and natural resources so that students may continue through a sequence of courses through high school. The knowledge and skills students develop will be used in future courses within the CASE program. Student experiences involve the study of communication, the science of agriculture, plants, animals, natural resources, and agricultural mechanics.



Principles of Agricultural Science – Animal (ASA)

This course follows the introductory course (AFNR) and is a foundational level (second course) course designed to engage students in hands-on laboratories and activities to explore the world of animal agriculture. Students will study animal anatomy, physiology, behavior, nutrition, reproduction, health, selection, and marketing. Students will acquire skills in meeting the nutritional needs of animals while developing balanced, economical rations. Throughout the course, students will investigate, experiment, and learn about documenting a project, solving problems, and communicating their solutions.



Principles of Agricultural Science – Plant (ASP)

This course follows the introductory course (AFNR) and is a foundational level (second course) course that teaches students about the form and function of plant systems. Students are immersed in inquirybased exercises filled with activities, projects, and problems to teach them plant concepts through laboratory and practical experiences. Student experiences will include the study of plant anatomy and physiology, classification, and the fundamentals of production and harvesting. Students will learn how to apply scientific knowledge and skills to use plants effectively for agricultural and horticultural production. Students will discover the value of plant production and its impact on the individual, the local, and the global economy.



Natural Resources and Ecology (NRE)

This course follows the introductory course (AFNR) and is a foundational level (second course) course that provides students a variety of experiences in the field of natural resources and ecology. Students will explore hands-on projects and activities while studying topics such as land use, water quality, stewardship, and environmental agencies. Students will focus on an ecosystem to study throughout the course and apply principles of natural resources and ecology to that ecosystem.



Agriculture Power and Technology (APT)

This course follows the introductory course (AFNR) and is a foundation level (second course) course that teaches students about the fundamentals of agricultural engineering. Students are immersed in inquiry-based exercises that focus upon the form and function of material, machines, and tools used in agriculture. Students will apply technical skill while becoming competent in the process that is used to operate, repair, engineer, and design agricultural tools and equipment. Student experiences will involve the study of shop safety, tool operation, materials selection and use, fabrication, energy and power, machines, machinery management, and engineering.



Animal and Plant Biotechnology – (APB)

This is a third level or specialization course and follows AFNR, and ASA or ASP. This course provides students with experiences in industry appropriate applications of biotechnology related to plant and animal agriculture. Students are expected to become proficient at skills involving micropipeting, bacterial cultures and transformations, electrophoresis, and polymerase chain reaction. Students will maintain a research level Laboratory Notebook throughout the course documenting their experiences in the laboratory. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations.



Food Science and Safety (FSS)

This is a third level course or specialization course and follows AFNR, and ASA or ASP. In this course students will complete hands-on activities, projects, and problems that simulate actual concepts and situations found in the food science and safety industry. Students will investigate areas of food science including food safety, food chemistry, food processing, food product development, and marketing. Students will maintain a Laboratory Notebook throughout the course documenting their experiences in the laboratory. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations.



Mechanical Systems in Agriculture (MSA)

This is a third level or specialization-level course and follows AFNR and APT. It is designed to provide rigorous applications in the agricultural engineering field. Throughout the course, students apply technical and engineering skills while becoming competent in the processes used to operate, repair, engineer, and design agricultural structures, engines, and equipment. Students practice technical skills including reading prints, troubleshooting machines, documenting an engine teardown and assembly, reading schematics, researching machine replacement parts, and calculating production efficiencies. The engineering portion of the course includes prototype development, computer aided design (CAD), 3D printing, documentation of machine processes, machine automation and programming, testing designs for structural integrity, and calculating machine speed and power.



Environmental Science Issues (ESI)

This course is a third level or specialization course in the CASE Program of Study and follows AFNR and NRE. Students will complete hands-on activities, projects, and problems that simulate actual concepts and situations found in the environmental science field, allowing students to build content knowledge and technical skills. Students will investigate areas of environmental science including ecosystem management, sustainable agriculture, energy choices, and pollution. Students will investigate, experiment, and learn about documenting a project, solving problems, and communicating solutions to their peers and members of the professional community.



Agricultural Research and Development (ARD)

This course is the capstone designed to culminate students' experiences in agriculture, based on the pathway of study they pursued. Woven throughout the course are projects and problems based in practical applications and designed to develop and improve employability skills of students. Students will further enhance research, critical thinking, and teamwork skills as they expand on content knowledge from previous CASE courses. Students will work to solve complex, real-world problems through a focused research project. This process will include conducting research, data analysis and communication, and the development of new products. The ARD course follows each of the five CASE specialization courses (Animal and Plant Biotechnology, Food Science and Safety, Mechanical Systems in Agriculture, Environmental Science Issues, or Agricultural Marketing and Communications) included in the CASE Program of Study Pathways. The knowledge and skills students develop will be valuable for college and career aspirations.



Technical Applications in Agriculture (TAA)

This course is a capstone-level course designed to provide students with the skill need to enter the agricultural technician career field. Through this course, students develop technological competencies through rigorous hands-on experiences in the classroom. Specifically, students will learn how electrical, fluid, diesel, precision, and mechanical systems function. They will use their mechanical skills to identify and communicate the cause and correction of equipment failures. The course will expose students to the newest agricultural technologies that support equipment industries while connecting them with future employers.



Agricultural Business Foundations (ABF)

This course is an elective course from the CASE course menu. It introduces students to business management in agriculture. Mathematics, reading, and writing components are woven in the context of agriculture and students will use the introductory skills and knowledge developed in this course throughout subsequent CASE courses. Throughout the course are practical and engaging activities, projects, and problems to develop and improve business and employability skills. Additionally, students investigate and develop viable business plans in order to solve local problems. The business plan ideas are communicated to student peers and members of the professional community.



AgXplore Middle School (AgX)

This course is an elective course from the CASE course menu. It includes unique and engaging hands-on activities and projects encouraging student exploration of the agricultural value chain from industry to consumer. In addition, the curriculum includes fresh and personalized assessment tools with laboratories, games, and questioning exercises. Projects throughout the course prepare students for selecting exploratory SAE projects they can implement after completing the course.

EXPLANATION FOR EACH SECTION OF THE APPLICATION

- 1. Section I Grant Title Page
 - a. School District, School Name, Address
 - b. Project Director Name, E-mail, Telephone, Fax
 - i. This should be the primary point person for the application and will be the person who receives automatic responses when the application is submitted.
 - ii. If this person is not the CASE Teacher, the CASE Teacher will be copied on correspondences from the Office of Food, Agriculture & Natural Resources Education, but will not receive automatic responses that are created through JotForm.
 - c. Business Administrator Name, E-mail, Telephone
 - d. CASE Teacher(s)
 - i. This should be all the teachers who will be served by the grant.
- 2. Section II CASE Course Selection
 - a. Select all courses being funded with the grant.
 - b. Eligible courses include:
 - i. Intro to Agriculture, Food and Natural Resources (AFNR) course
 - ii. Principles of Agricultural Science Plant (ASP) course
 - iii. Principles of Agricultural Science Animal (ASA) course
 - iv. Animal and Plant Biotechnology (APB) course
 - v. Natural Resources and Ecology (NRE) course
 - vi. Food Science and Safety (FSS) course
 - vii. Agricultural Power and Technology (APT) course
 - viii. Mechanical Systems in Agriculture (MSA) course
 - ix. Environmental Science Issues (ESI) course

- x. Agricultural Research and Development (ARD) course
- xi. Technical Applications in Agriculture (TAA) course
- xii. Agricultural Business Foundations (ABF) course
- xiii. AgXplore Middle School (AgX) course
- 3. Section III CASE Grant Eligibility/Requirements (Total 50 points)
 - a. Is your district approved by NJDOE to conduct an AFNR program/program of study?
 - i. Yes
 - ii. No (must upload a copy of the program/program of study application)
 - b. Check each box to indicate you understand the eligibility/requirements to receive CASE grant funds.
 - i. District must be approved by NJDOE to conduct AFNR program/program of study. *If program is not approved yet, but is in process with NJDOE, please provide a copy of the program/program of study application.
 - ii. CASE teacher(s) of grant funded schools will be available to attend at least one New Jersey CASE meeting with NJDA, Office of Food, Agriculture and Natural Resources Education staff.
 - School district can order all CASE equipment/supply items before June 30, 2023 and have all CASE supplies/equipment available for the first day of school in 2023-2024. (This strict requirement of the NJ CASE grant directly impacts effective delivery of the CASE program.)
 - iv. If instructional program is discontinued, all NJDA CASE granted equipment must be returned to NJDA, Office of Food, Agriculture & Natural Resources Education within four months.
 - c. Upload the following Documentation:
 - i. Active Agricultural Education Advisory Committee Information (20 points)
 - 1. Approved Programs
 - a. Attach a copy of AFNR Advisory Committee minutes from at least one meeting (that occurred after September, 2023) reflecting discussions to conduct and expand CASE courses/program of study.
 - b. Minutes MUST also contain a current list of advisory committee members AND those in attendance.
 - 2. Schools Seeking AFNR Program Approval
 - a. Attach the agenda for the first Advisory Committee meeting with CASE as a topic of new business.
 - b. MUST contain a list of anticipated advisory committee members and list of scheduled meeting dates for the 2023-24 school year.
 - ii. Current Articulation Agreement(s) (15 points)
 - 1. Attach current copies of articulation agreements with one or more postsecondary institutions.
 - 2. Articulation agreements **<u>must be signed</u>** by chief administrators at each institution (secondary and post-secondary).
 - 3. If there aren't current articulation agreements in the district, upload a statement explaining why there isn't one in place and share plans for obtaining one.
 - d. Identify how the funds will be used **AND** upload the supporting documentation.
 - i. Professional Development
 - 1. Funds are being requested to attend a CASE Institute (which can include travel expenses to and from the CI Virtual options are available for some CIs).

- a. A certified Teacher of Agriculture (or a teacher employed by the school district actively working towards certification) from the applying school must be registered to attend a 2023 CASE Institute.
- Attach a copy of the registration confirmation by CASE. (If CI registration is dependent on this grant, input the words "Pending FY23 funding" in comment box during online registration with CASE.)
- c. The Office of Food, Agriculture and Natural Resources Education is not responsible for managing registrations for attendees to CASE Institutes.
- d. A valid CASE Certificate must be included in the final report to NJDA to indicate the teacher is fully certified to teach the CASE course funded by this grant.
- e. If a teacher does not attend or does not successfully complete the CI, then the entire grant must be refunded by July 31, 2023.
- ii. Equipment/supplies
 - 1. Funds are being requested for equipment and supplies (which can include previously certified course(s)).
 - a. Upload proof that the teacher has successfully completed the CASE Institute and is certified for the CASE course for which funding is being requested.
 - i. Certificate of Completion
- iii. Facility
 - 1. Funds are being requested to create or update a CASE class/lab.
 - 2. See CASE Learning Environment document at:
 - http://www.case4learning.org/index.php/usingcasepurchasemanuals?id=80
 - a. Upload plans for creating/updating a CASE class/lab.
 - b. Include a listing of items as it relates to the fixtures, computer hardware, computer software, electronics and/or furnishings needed.
- 4. Section IV Narrative (30 points Total)
 - a. Discuss local objectives for participation in the CASE program of study. (400 words max, 10 points)
 - b. Discuss how the STEM based CASE program of study will help meet local, state and global agriculture, food and natural resources industry supply and demand. (200 words max, 5 points)
 - c. Discuss how articulation agreements are managed and how college credit for high school CASE courses is impacting your student enrollment (200 words max, 5 points)
 - d. Discuss plans to use CASE EoC Assessments and the related data. (CASE Online is provided to all NJ CASE programs, free of charge, by the NJDA OFANRE in cooperation with NJDOE.) (200 words max, 5 points)
 - e. Discuss the impact NOT receiving this grant will have on the delivery of CASE at your school. (200 words max, 5 points)
- 5. Section V Budget detail (expenditures) (Purchase Manual Tabs or spreadsheet) (10 points Total)
 - a. Upload detailed and itemized budget for CASE expenditures. Please use one of the following two options:
 - i. Utilize CASE website Purchase Manual (PM) Vendor tabs. (https://www.case4learning.org/purchasing-manuals/products-by-vendor)
 - 1. Please use a separate purchase manual tab for each course.
 - 2. Please identify each purchase manual tab with course name.

- ii. OR create a spreadsheet that includes the following for each item:
 - 1. Course Name
 - 2. Vendor Name
 - 3. Item Name & Number
 - 4. Quantity
 - 5. Description
 - 6. Item Price
 - 7. Total Price
 - 8. Total Cost of All Materials and Supplies
- b. If professional development is being requested, please provide details regarding transportation and related costs, even if being paid by other sources.
- 6. Section VI Budget Summary Form (10 points Total)
 - a. See page 10 for Budget Summary Form.
 - b. Summarize all budget detail into three (3) categories
 - i. CASE Institute
 - ii. CASE equipment/supplies
 - iii. CASE Facility
 - c. Include FY23 CASE Grant requested funds and potential matching or other funds supporting the local CASE program.
- 7. Signature Page
 - a. See page 11 for Signature Page.
 - b. Obtain the necessary signatures and upload.

*PLEASE NOTE: URLs in this document may change without notice. Please reach out to Erin Noble, <u>erin.noble@ag.nj.gov</u>, if a webpage you need to access is no longer available.





New Jersey CASE Grant FY23

PLEASE upload this form to the application for funds.

School/District:_____

			FUNDIN	IG SOURCES	
1 BUDGET CATEGORY			2	3	
			FY 23 NJ CASE <u>Requested Funds</u>	Potential matching or other funds supporting local CASE program	
A.	CASE Equipment/Supplies Summary/total only		\$	\$	
В.	CASE Institute		\$	\$	
C.	Facility		\$	\$	
TOTAL			\$	\$	

CASE Teacher (print):		
CASE Teacher Signature:	Date:	
Building Principal (print):		
Building Principal signature:	Date:	
Business Administrator (print):		
Business Administrator signature:	Date:	





New Jersey CASE Grant FY23

PLEASE upload this form to the application for funds.

DURATION OF PROJECT: March 1, 2023 TO: June 30, 2023

MAXIMUM TARGETED AMOUNT OF FUNDS PER GRANTEE: Up to 5,000.00

GRANT AND TOTAL AMOUNT SUBJECT TO THE AVAILABILTY OF STATE FUNDING

- ♦ ONLY APPLICATIONS (AND RELATED MATERIALS) SUBMITTED VIA JOTFORM WILL BE ACCEPTED.
- ✤ NO FACSIMILES OR HARD COPIES WILL BE ACCEPTED.
- ✤ NO LATE APPLICATIONS WILL BE ACCEPTED.
- NO ADDITIONAL MATERIALS CAN BE SUBMITTED AFTER RECEIPT OF THIS APPLICATION.
- ✤ NO APPLICATIONS WILL BE ACCEPTED FROM SCHOOLS WITH OUTSTANDING CASE GRANT REPORTS.
- SUBMISSION MUST BE RECEIVED BY 11:59 PM, WEDNESDAY, MARCH 1, 2023.
- ✤ GRANTEES WILL RECEIVE A LINK TO SUBMIT A FINAL REPORT IN THE ACCEPTANCE EMAIL.

*<u>FAILURE TO INCLUDE REQUIRED APPLICATION COMPONENTS CONSTITUTES A VIOLATION OF THE GRANT AND WILL</u> <u>RESULT IN THE APPLICATION BEING ELIMINATED FROM CONSIDERATION.</u>

APPLICATION CERTIFICATION: To the best of my knowledge and belief, the information contained in this application is true and correct. I further certify the requested documents are uploaded and complete:

Signature of Food, Ag and Nat. Res./CASE Teacher	Print Name	Date
Signature of District Chief School Administrator	Print Name	Date