New Jersey Department of Agriculture Office of Agricultural Education

New Jersey CASE Grant FY 15 Announcement and Application

Description of NJ CASE Grant Opportunity

The FY 15 NJ Department of Agriculture CASE Grants are <u>competitive</u>. Eleven (11) \$7500 grants will be awarded to schools meeting 100% of NJ CASE Grant eligibility requirements and implementing a CASE program of study which means <u>schools will be beginning</u>, <u>continuing</u>, <u>completing a sequence of courses in a pathway of Agriculture</u>, <u>Food and Natural Resources</u> (<u>AFNR</u>). See the diagram below or visit: http://www.case4learning.org/index.php/curriculum/case-pathways



The NJ CASE grants are subject to state funding. Accumulated points on applications will determine recipients for grant awards. All FY 15 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 listed in the CASE Purchase Manual (which includes upgrades to lab facilities) and/or for teacher professional development at a 2015 CASE Institute (CI).

 $\frac{http://www.case4learning.org/index.php/usingcasepurchasemanuals}{http://www.case4learning.org/index.php/professional-development/case-institute/case-institute-offerings}$

Grant submission rules:

- 1. Applicants must submit a complete original application plus three hard copies of the grant application. (do not submit pages 1-5 of this document).
- Applications must be received in the Office of Agricultural Education (2nd floor) at the New Jersey Department of Agriculture, 369 So. Warren Street, PO Box 330, Trenton, NJ 08625, by 4 pm on Wednesday, February 26th, 2015.
- 3. No facsimiles or email copies will be accepted.
- 4. Applications must arrive in one package; additional documentation will not be accepted after the grant application is received. (Post submission edits will NOT be accepted!)

Please note: Using the US Postal Service will not guarantee timely submission of the grant application. If grant funds are important to success of your program, it is suggested that the application be delivered in person.

CASE Program Information

The CASE Model (excerpts below from www.case4learning.org)

The Curriculum for Agricultural Science Education $(CASE^{m})$ 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.

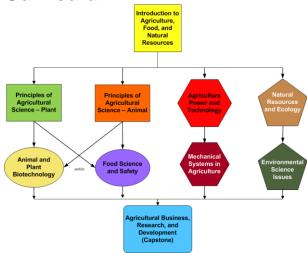


The CASE Learning Environment

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.

See the CASE Learning Environment link on the Purchase Manual tab of the CASE website. http://www.case4learning.org/index.php/usingcasepurchasemanuals

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 CASE course certification. **Successful completion of the CASE Institute is required for this New Jersey CASE funding**. For more information about CIs, see 'Attending a CASE Institute' at:

http://www.case4learning.org/index.php/professional-development/case-institute/case-institute-offerings

Assessment

http://www.case4learning.org/index.php/assessment-learning-reflections/philosophy-and-strategies 'Check for Understanding' or short quizzes related to the concepts and performance objectives are provided for each lesson.

Unit and End-of-Course Exams

CASE Online is available to conduct CASE assessments at
http://staging.case4learning.org/ (access to site)

Each assessment tests student knowledge and understanding related to concepts specific to individual CASE courses. The assessments measure student proficiencies related to AFNR, science, and mathematics standards as prescribed in CASE lessons.

National Assessments

A recommended sequence of courses constituting a CASE program of study includes introductory, foundation, specialization and capstone courses. National Assessment Exams will be created as a summative assessment for completers of a CASE Program of Study. Expect the development of this phase of the CASE program after 2015.

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 the way they are intended by design, 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.

2015 CASE

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 eight available courses below.



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

This is the first course for all CASE course sequences. It introduces students to leadership, science, plants, animals, natural resources, and agricultural mechanics using the hands-on approach of activities, projects, and problems. Students also develop a career portfolio as they investigate their personal interests and careers in Agriscience. Foundational courses Principles of Agricultural Science – Animal (ASA), Principles of Agricultural Science – Plant (ASP), Natural Resources and Ecology (NRE) or Agriculture Power and Technology (APT) are the next courses in the sequence followed by specialization courses Animal and Plant Biotechnology (APB), Food Science and Safety (FSS), Mechanical Systems in Agriculture (MSA) and Environmental Science Issues (ESI). The final (fourth) course in all pathways is the (capstone) Agriculture Research and Development (ARD) course.



Principles of Agricultural Science – Animal (ASA)

This course follows the introductory course (AFNR) and is a foundational level or second course (sophomore) course in the animal systems sequence in which students explore the world of animal agriculture and develop a management guide for an animal of their choice. Areas of study include history and domestication, handling and behavior, anatomy and physiology, nutrition, reproduction, genetics, health, selection, and marketing. The next level course (specialization) is either APB or FSS with the fourth level course (capstone) being ARD.



Principles of Agricultural Science – Plant (ASP)

This course follows the introductory course (AFNR) and is a foundational level or second course (sophomore) course in the plant systems sequence in which the students study the production of plants while developing a grower's handbook. Areas of study include soils, hydroponics, plant anatomy and physiology, taxonomy, growing environments, sexual reproduction, asexual reproduction, insects and diseases, and production and marketing. The next level course (specialization) is either APB or FSS with the fourth level course (capstone) being ARD.



Animal and Plant Biotechnology – (APB)

This is a third level or specialization (junior) course where students study animal and plant biotechnology concepts while utilizing a laboratory notebook. It follows AFNR, and ASA or ASP. Research and experimental design will be highlighted as students develop and conduct industry appropriate investigations. Areas of study include micro pipetting, bacterial cultures and transformations, electrophoresis, and polymerase chain reaction. The final course in the pathway is the fourth level (capstone) ARD course.

Natural Resources and Ecology (NRE)

This course follows the introductory course (AFNR) and is a foundational level or second (sophomore) course in the natural resources pathway sequence in which the students explore natural resources and ecology. Areas of study include but are not limited to: conservation, preservation, land issues, water, air, energy, forestry, and more. The next level course (specialization) is Environmental Science Issues (ESI) (field test planned for 2016) with the fourth level course (capstone) being ARD.

Food Science and Safety (FSS)

This is a third (junior) level or specialization (junior) course where students study food science and safety concepts. It follows AFNR, and ASA or ASP. Areas of study include but are not limited to: food chemistry, microbiology, enzymes, preservation, fermentation, food borne illnesses, HACCP, human health and nutrition, regulation, animal and plant products, food labeling and packaging, marketing processing, consumer concerns and preferences, careers in food science and safety and feeding the world. The final course in the pathway is the fourth level (capstone) ARD course.

Agriculture Power and Technology (APT) (field test)

Agricultural Power and Technology is a foundation level course or second (sophomore) course in the Ag Mechanics pathway that will teach students the fundamentals of agricultural mechanics. Students are immersed in inquiry-based exercises filled with activities, projects, and problems 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. The next level course (specialization) is Mechanical Systems in Agriculture (MSA) with the fourth level course (capstone) being ARD.

Agricultural Research and Development (ARD) (field test)

Agricultural Research and Development is the final/fourth level or capstone course for all students in all pathways. ARD is 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 critical thinking and teamwork skills as they expand on content knowledge from previous CASE courses. Students would have taken the introductory (AFNR), a foundational course in (ASA, ASP, NRE or APT) followed by a specialization course (APB, FSS, MSA or ESI) and before taking the capstone (ARD) course.

New Jersey Department of Agriculture Office of Agricultural Education

New Jersey CASE Grant FY 15 Application

Title Page - Section I

Section A:						
Title: New Jersey CASE Gr						
	ivision/Office: Division of Agricultural and Natural Resources – Office of Agricultural Education (OAE)					
Section B:						
SCHOOL DISTRICT		SCHOOL				
ADDRESS						
CITY STATE		ZIP				
PROJECT DIRECTOR: (print)	(si _i	gn)				
TELEPHONE #: ()	F	AX #: ()				
E-MAIL:						
BUSINESS ADMINISTRATOR: (print)						
TELEPHONE #: ()						
DURATION	OF PROJECT: April 1.	, 2015 TO: June 30, 2015				
MAXIMUM	TARGETED AMO	UNT OF FUNDS: \$7,500.00				
_						
GRANT AND TOTAL AMOUN	T SUBJECT TO T.	HE AVAILABILTY OF STATE FUNDING				
APPLICATION CERTIFICATION: To I further certify the following are enclosed and complete: AND SUMMARY, ORIGINAL AND THREE COPIES	* TITLE PAGE, APPLICA	d belief, the information contained in this application is true and correct. TION NARRATIVE, ASSOCIATED FORMS, BUDGET DETAIL PPLICATION PACKAGE				
Signature of Ag, Food and Nat. Res./CASE Teacher	Print Name	Date				
Signature of District Chief School Administrator	Print Name	Date				
		TITUTES A VIOLATION OF THE GRANT AND WILL RESULT				
IN THE APPLICATION BEING ELIMINATED FRO	OM CONSIDERATION.					
APPLICATIONS MUST BE DELIVE	ERED/SENT TO:					
Nancy J. Trivette, State Program Lead	ler. Agricultural Edu	cation				
Office of Agricultural Education	or, rigitourarar Eac	- Carron				
New Jersey Department of Agriculture	e					
Room 204, P.O. Box 330, 369 South V						
Trenton, NJ 08625-0330						
		ED BY: 4:00 PM , Thursday, February 26, 2015				
NO FACSIMILE OR EMAIL SUBMISSIONS WILL NO LATE APPLICATIONS WILL BE ACCEPTED RE		POSTMARKED.				
NO ADDITIONAL MATERIALS CAN BE SUBMITTE	ED AFTER RECEIPT OF THE	S APPLICATION.				
NO APPLICATIONS WILL BE ACCEPTED FROM SO	HOOLS WITH OUTSTAND	ING OAE GRANT REPORTS				

Section II

2015 CASE courses selection (check all boxes that apply to grant request):
☐ Intro to Agriculture, Food and Natural Resources (AFNR) course
☐ Principles of Agricultural Science – Plant (ASP) course
☐ Principles of Agricultural Science – Animal (ASA) course
☐ Animal and Plant Biotechnology (APB) course
☐ Natural Resources and Ecology (NRE) course
☐ Food Science and Safety (FSS) course
☐ Agricultural Power and Technology (APT) field test/course
☐ Agricultural Research and Development (ARD) field test/course
Section III (40 pts.)
CASE Grant Eligibility
Eligibility: Applicants must have a DOE approved AFNR program/program of study and have in place or plan to implement a CASE sequence of courses.
Letters A- G must be able to be checked to be eligible for the FY 15 New Jersey CASE grant:
A. (5 pts.)
☐ The DOE approved AFNR program/program of study is implementing a
CASE pathway, or has plans to build a program of study using CASE sequential
courses outlined in the CASE pathway diagram in the following site:
http://www.case4learning.org/index.php/curriculum/case-pathways
B. (10 pts.) A CASE School District Agreement (SDA) form to participate in a
CASE Institute (signed by appropriate school personnel) has been submitted to
Miranda Chaplin, CASE Operations Coordinator.
miranda.chaplin@case4learning.org Please attach a copy of CASE SDA to
this grant application for any/all courses funding is requested for.

A signed form reflects: 1) district administration support for CASE teacher professional development, 2) high school course sequencing leading to a program of study, and 3) support to obtain CASE supplies and equipment appropriate for the CASE learning environment. The attached link includes the CASE School District Agreement: http://www.case4learning.org/index.php/professional-development/case-institute-offerings (the link for the agreement is in the second paragraph from the top of the web page)

Please note: The teacher must satisfactorily complete the CASE Institute and submit their CASE course portfolio checklist signed by the CASE Lead Teacher to NJDA, OAE with the <u>final report</u> to indicate they are fully certified to teach the CASE course funded by this grant. <u>If a teacher did not attend or did not successfully complete the CI, then grant must be refunded.</u>

C.	(5 pts.) CASE Agriculture teacher(s) of grant funded schools will
	participate in an Office of Agricultural Education CASE meeting (approx. 2 hour meeting) to discuss CASE program, program of study and grant process. CASE school supervisors/administrators are welcome. Identify those who will attend the
	meeting: (add lines if needed)
	Name(s):
	Name(s):
D.	☐ (10 pts.) Active Advisory Committee documentation:
	a. Attach a copy of Agricultural Education Advisory Committee minutes from at least one meeting (after September 1, 2014) with
	recommendations to implement a rigorous program of study utilizing
	CASE. Program of Study Framework: http://www.nj.gov/education/cte/study/components.pdf
_	b. Attach a list of current advisory committee members
Ė.	(10 pts.) Attach articulation agreements (copies) (for 2014-15 school year)
	with one or more post-secondary institutions signed by chief administrators of each institution (secondary and post-secondary).
F.	☐ School district will place all CASE equipment/ supply orders before June 30, 2015 and have all CASE supplies/equipment available for the first day of school in 2015-16. This strict requirement of the NJ CASE grant directly impacts efficient and effective delivery of the CASE Program.
G.	Funds (Professional Development and/or Equipment and Supplies)
	 a. Professional development: Funds are requested to attend a CASE Institute. A certified Agriculture teacher from the applying school must be registered to attend a 2015 CASE Institute. Please attach a copy of registration confirmation by CASE. (If CI registration is dependent on this grant, input the words "Pending FY15 funding" in Comment Box.) Grantees or non-grantees are responsible for managing this registration. b. Equipment/Supplies: Funds are requested for equipment and supplies for previously certified course(s). Please provide proof that the teacher has successfully completed a CASE Institute and is certified for course that funding is being requested. (CI certificate of Completion is acceptable.)

Section IV (50 pts.)

Narrative

Brief narrative (2 pages or less) including local objectives for participating in the CASE program including:

- i. Discuss future goals/plans for the Agricultural Education program using CASE model and indicate impact on employment needs.
- ii. Describe how the CASE course(s) funded by this grant will be implemented in the agriculture program. Please address 1-5 below: (Highest points will be awarded to grantees following an appropriate (CASE) sequence of courses (introductory, foundational specialization and capstone)
 - 1) Names of courses for which funding is requesting,

2) course sequence description for agriculture program,
Provide local evidence (ie. Course catalog printout) of
appropriate CASE course sequence as outlined at:
http://www.case4learning.org/index.php/curriculum/case-pathways

- 3) grades of students enrolled in each course (ie. 9th grade students will be enrolled into AFNR),
- 4) promotion of CASE course(s) to students and parents, and
- 5) equipment and supplies that will be necessary to purchase with this grant to offer the course.
- iii. Discuss the districts use or plans for use of *CASE Online*, which includes a *student version of the courses*.

Section V (5 pts.)

Budget Detail

Please use one of the following two options to develop and provide budget details for CASE supplies and equipment:

a) CASE website Purchase Manual (PM) Vendor tabs

Please use a separate tab/spreadsheet tab **for each course** that funding is being requested for at: http://www.case4learning.org/index.php/usingcasepurchasemanuals

Example: If funding is being requested for ASP and APB, then you will submit a Vernier Tab for each course. (*Please be sure the course name/initials are at the top of each page*).

b) \underline{OR} use a spreadsheet that includes the following information:

Course name for which materials are being requested: Vendor Name; Item Name/#; Quantity; Description; Item Price; Total Price; Total Cost of All Materials and Supplies

Section VI (5 pts.)

Budget Summary

Budget Summary Form/Final Report Form – (Columns 2 and 3 completed at time of application). **Please note**: This form must be re-submitted with Column 4 completed for the Final Report.

Grant Submission Checklist and Requirements

(Please DO NOT submit pages 1-5 of grant announcement/background information with grant application.)

(Please submit Section I – VI in the order indicated below)

- 1. **Section I** Grant Title Page
- 2. **Section II** –CASE course selection
- 3. **Section III** CASE Grant Eligibility –Items A- G (40 points) including the following attachments

i. Copy of signed CASE School District Agreement form

- a. Please note: If applying for professional development funding, satisfactory completion of the CASE Institute (CI) in 2015 is a grant requirement. The CI Scope and Sequence/Portfolio (provided at the CI) must be signed by a CASE Lead Teacher for each CASE Institute attended and submitted with the final NJDA CASE Grant report.
- ii. Copy of CI registration confirmation from CASE
- iii. Copies of Agricultural Education Advisory Committee minutes and a list of Agriculture Advisory Committee members names and titles
- iv. Copies of articulation agreement(s)
- 4. **Section IV** Narrative (2 pages or less) (50 points)
- 5. **Section V** Expenditure detail (Purchase Manual Tabs or spreadsheet) (5 points)
- 6. **Section VI** Budget Summary Form/Final Report Form (5 points)

NJ DEPT. OF AGRICULTURE, OFFICE OF AGRICULTURAL EDUCATION CASE GRANT FY15 **BUDGET SUMMARY FORM**

and

FINAL REPORT FORM

School/District:

		FU N D 1	NG SOURC	ES
	1	2	3	4
	BUDGET CATEGORY	(Planned Expenditures) FY 15 NJ CASE Requested Funds	(Planned) Matching or other funds supporting local CASE program	(Actual Expenditures) Use this column for Final Report)
A.	CASE Class/Lab Equipment/Supplies Summary/total only	\$	\$	S
В.	CASE INSTITUTE	\$	\$	\$
C.	Other (please specify)	\$	\$	\$
	TOTAL	\$	\$	\$

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

FINAL REPORT COVER PAGE - FY15 NJ CASE GRANT Final Report Due Date: August 30, 2015 (use this page when submitting the final report)

CASE School:	
We are submitting the following information requirements for the FY 15 CASE grant	in fulfillment of the Final Report
1) Final Report Cover page	
2) Final Report Narrative	
3) CASE Institute Scope and Sequence/Portfo	
4) Copies of articulation agreement(s) with position5) Budget Detail Forms (indicating all expendence)	•
6) Final Budget Summary.	intures) and
CASE Teacher (print):	
CASE Teacher Signature:	Date:
Principal (print):	
Principal Signature:	Date:
Business Administrator (print):	
Business Administrator Signature:	Date:
Submit to: Nancy J. Trivette, State Agricultural E Department of Agriculture, P.O. Box 330, 369 S. August 30, 2015. Final report may be sent in or nancy.trivette@ag.state.nj.us ***********************************	Warren Street, Trenton, NJ 08625-0330 by <i>ne pdf document</i> by email:
For State Office Use:	
Final Program Fiscal Report Review/Appr	oval:
Nancy J. Trivette	Date
State Agricultural Education Program Lea Office of Agricultural Education	der

Final Report Requirements

The final grant report is due by August 30, 2015 and shall include:

1) Brief narrative (do not exceed two pages) describing usage of grant funds:

- a. Describe any extenuating circumstances or challenges expending FY 15 CASE grant funds.
- b. Describe sequence of courses offered in the program of study: provide detail about the number of CASE students served in each CASE course.
- c. Provide detail about college credit for CASE courses including numbers of students attending post-secondary institutions with articulation agreements.
- d. Describe use of *CASE Online* as a student resource (student version of courses) and for end of course testing.
- e. Describe other grant sources and amounts (if any) that were used to equip the 2015 CASE courses/program and CASE Learning Environment such as local program budget, county board of agriculture, Perkins funds, etc.
- f. Other information deemed relevant to the success of implementation of CASE.
- 2) A copy of the CASE Institute Scope and Sequence/Portfolio (provided to the teacher at the CASE Institute, signed by a CASE Lead Teacher), indicating successful completion of the CASE Institute(s) for each course funded by this grant.
- 3) Attach copies of articulation agreement(s) with post-secondary institution(s) for CASE courses.
- 4) Budget detail forms (CASE Purchase Manual Vendor tab/forms may be used) **itemizing all CASE materials <u>purchased</u> with New Jersey CASE FY 15 grant funds**. All materials purchased with this grant must be received by June 30, 2015 for use on the first day of class in 2015.
- 5) Budget Summary Form/Final Report Form. Please complete column 4 of Budget Summary/Final Report Form, showing all grant funds received and spent for the 2015 CASE course(s) at your school.