New Jersey Department of Agriculture Office of Agricultural Education

New Jersey CASE Grant FY 16 Announcement and Application Description of NJ CASE Grant Opportunity

The FY 16 NJ Department of Agriculture CASE Grants are <u>competitive</u>. Grants (up to \$5000) will be awarded to schools implementing a CASE program of study and meeting 100% of NJ CASE eligibility requirements. Grant funds must be utilized beginning the fall of 2016. Grant funding priorities for implementation include: 1) establishing new CASE Programs, 2) completing a CASE sequence of courses/pathway, 3) initiating new pathways and 4) supplementing previously funded CASE courses.

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 16 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 class/lab facilities) and/or for teacher professional development at a 2016 CASE Institute (CI).

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**).
- 2. 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 Thursday, February 25th, 2016.
- 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. Applications arriving after 4 pm will not be accepted.

CASE Program Information

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

The Curriculum for Agricultural Science Education (CASE) 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.

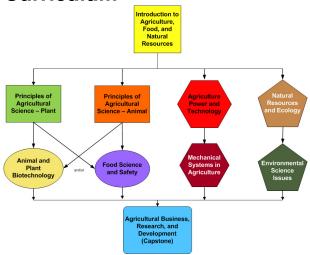


The CASE Learning Environment

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 each 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:

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

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 (*CASE Online*) are provided to all New Jersey CASE certified teachers.

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.

2016 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 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 such as 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, hazard analysis and critical control point (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)

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 skills 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.

Environmental Science Issues(field test)

The CASE Environmental Science Issues course is a specialization-level course (junior) that enables students to research, analyze, and propose sustainable solutions to environmental issues

Students are immersed in inquiry-based exercises filled with activities, projects, and problems, which develop data acquisition and analysis techniques, critical thinking and evaluation abilities related to environmental issues, as well as independent research and problem solving. This course has been fully funded with plans to host Field Test CASE Institutes the summer of 2016. The final course in the pathway is the fourth level (capstone) ARD course.

Agricultural Research and Development (ARD)

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) before taking the capstone (ARD) course.*

New Jersey Department of Agriculture dete: January 25, 2016 Office of Agricultural Education

New Jersey CASE Grant FY 16 Application

Title Page – Section I

Section A:					
Title:	New Jersey CASE Gra				
Division/Office:	Division of Agricultur	al and Natural R	tesources – Office of	of Agricultural Educa	tion (OAE)
Section B:					
SCHOOL DISTRICT			SCHOOL	NAME	
ADDRESS			5011001		
CITY	STATE			ZIP	
CITT	SIMIL			Zii	
PROJECT DIRECTO	OR: (print)		(sign)		
TELEPHONE #:	()		FAX #· ()	
			-	/	
	STRATOR: (print)				
TELEPHONE #: (_)	E-MAI	L:		
	DURATION	OF PROJECT: A	pril 1, 2016 TO: Jun	e 30, 2016	
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GRANT A	ND TOTAL AMOUNT	T SUBJECT T	O THE AVAILA	BILTY OF STATE	E FUNDING
APPLICATION	CERTIFICATION: To	the best of my knowle	dge and belief, the informa	ation contained in this applica	ation is true and correct.
	owing are enclosed and complete: ' IGINAL AND THREE COPIES				s, BUDGET DETAIL
					_
Signature of Ag, Food a	nd Nat. Res./CASE Teacher	Print Name		Date	
Signature of District Ch	nief School Administrator	Print Name		Date	-
*FAILURE TO IN	NCLUDE REQUIRED AP	PPLICATION CO	OMPONENTS CON	STITUTES A VIOLA	TION OF THE
	LL RESULT IN THE AP				
APPLICATION	S MUST BE DELIVE	RED/SENT TO):		
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•	e, State Frogram Leads			·e	
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Trenton, NJ 086	*	varion st.			
,					
	D THREE COPIES M		EIVED BY: 4:00 l	PM , Thursday, Feb	ruary 25, 2016
	EMAIL SUBMISSIONS WILL I ONS WILL BE ACCEPTED REC		DATE POSTMARKED.		
NO ADDITIONAL MA	TERIALS CAN BE SUBMITTEI	D AFTER RECEIPT C	F THIS APPLICATION.	REPORTS	
1.0 MI LICATIONS W	THE BE ACCES TED TROM SCI		LEADING OAL GRAINT	ILI OKID	

Section II

2016 CASE courses selection (check all boxes that apply to this 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) course

Environmental Science Issues (ESI) field test course

Agricultural Research and Development (ARD) course

Section III (40 pts.)

CASE Grant Eligibility

Eligibility/Requirments:

- Applicants must be approved by NJDOE to conduct AFNR program/program of study. See website: http://www.nj.gov/education/cte/pubvoc.htm
 - *If applicants are applying for AFNR program approval, please provide a copy of the application.
- CASE Agriculture teacher(s) of grant funded schools will be available to attend at least one New Jersey CASE meeting with NJDA, Office of Ag Education staff at a location to be announced.
- School district will have ordered all CASE equipment/supply items before June 30, 2016 and have all CASE supplies/equipment available for the first day of school in 2016-17. This strict requirement of the NJ CASE grant directly impacts efficient and effective delivery of the CASE Program.
 - A. (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 each course for which funding is requested.

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>

- B. (20 pts.) Active Advisory Committee documentation:
 - a. Attach a copy of Agricultural Education Advisory Committee minutes from at least one meeting (after September 1, 2015) 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. Minutes must contain a list of current advisory committee members AND a list of those attending the each meeting.
- C. (15 pts.) Attach articulation agreements (copies) (for 2015-16 school year) with one or more post-secondary institutions signed by chief administrators of each institution (secondary and post-secondary). Grantees without current articulation agreements will not receive available points.
- D. (5 pts.) 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 2016 CASE Institute. Please attach a copy of registration confirmation by CASE. (If CI registration is dependent on this grant, input the words "Pending FY16 funding" in Comment Box.) Grantees and/or non-grantees are responsible for managing this registration.
 - b. Equipment/Supplies: If 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 (30 pts.)

Narrative

Brief narrative (1 page or less) including local objectives for participating in the CASE program including:

- i. Explain the purpose/objective for applying for grant funds including how CASE grant funds will be used and for what purchases.
- ii. Explain how agricultural education and CASE will be promoted/marketed to new audiences of students that are not currently being served.
- iii. Discuss *CASE Online* including assessment results and how the *Student version* will be being used.

Section V (10 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) <u>OR</u> use a spreadsheet that includes the following information: Course name for which materials are being requested: 1) Vendor Name; 2) Item Name/#; 3) Quantity; 4) Description; 5) Item Price; 6) Total Price; 7) Total Cost of All Materials and Supplies

Section VI (10 pts.)

Budget Request Summary

Budget Request Summary Form - Please summarize (totals) of all requested purchases in three (3) categories: 1) CASE equipment/supplies, 2) CASE Professional Development and 3) other

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- D (50 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 2016 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 including a complete list of Agriculture Advisory Committee members names and titles and those in attendance
 - iv. Copies of articulation agreement(s)
 - v. Copies of previously completed CASE certification of completion (if applicable)
- 4. **Section IV** Narrative (1 page or less) (30 points)
- 5. **Section V** Expenditure detail (Purchase Manual Tabs or spreadsheet) (10 points)
- 6. **Section VI** Budget Summary Form/Final Report Form (10 points)

NJ DEPT. OF AGRICULTURE, OFFICE OF AGRICULTURAL EDUCATION CASE GRANT FY16

BUDGET REQUEST SUMMARY FORM

School/District:		

1 BUDGET CATEGORY		FUNDIN	DING SOURCES	
		FY 16 NJ CASE Requested Funds	Potential matching or other funds supporting local CASE program	
A.	CASE Class/Lab Equipment/Supplies Summary/total only	\$	\$	
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, FY16 NJ CASE GRANT

Final Report Due Date: August 30, 2016 (Please submit this cover page when submitting the final report)

CASE School:

	bmitting the following information in fulfillment of the Final Report
-	ents for the FY 16 CASE grant
	eport <u>Cover page</u>
	al Report Narrative - brief narrative (not to exceed one page):
a.	Describe any extenuating circumstances or challenges expending FY 16 CASE grant funds.
b.	Discuss sequence of courses offered in the program of study: provide detail about the number of CASE students served in each CASE course and number served with articulation agreements.
C.	Discuss how <i>CASE Online</i> Student version is being used.
	Discuss results of CASE Online Assessments.
	Other information deemed relevant to the success of implementation of CASE.
3) Copies	of <u>CASE Institute Scope and Sequence/Portfolio</u> signed by a CASE Lead
Teacher	. B
	of <u>articulation agreement(s)</u> with post-secondary institution(s)
	<u>Detail Forms</u> : please reflect all expenditures of the FY 16 New Jersey CASE
	zing CASE Purchase Manual Vendor tab/forms
<u>Form (p.1</u>	Summary Final Report Form: Please complete <u>Budget Summary Final Report</u> 2), to summarize all grant funds received and spent for the 2016 CASE
course(s).	
CASE Tea	acher (print):
CASE Tea	acher Signature:Date:
Principal ((print):
Principal S	Signature:Date:
Business A	Administrator (print):
	Administrator Signature:Date:
Departme	: Nancy J. Trivette, State Agricultural Education Program Leader, New Jersey nt of Agriculture, by August 30, 2016 <u>in one pdf document</u> by email to: rette@ag.state.nj.us
*****	**************************************
	Office Use:
	gram Fiscal Report Review/Approval:
Nancy J. 7	Trivette Date
State Agri	Agricultural Education Program Leader Agricultural Education

NJ DEPT. OF AGRICULTURE, OFFICE OF AGRICULTURAL EDUCATION CASE GRANT FY16

BUDGET SUMMARY FINAL REPORT FORM

School/District:	

1 BUDGET CATEGORY			FUNDING SOURCES			
			2		3	4
			Expenditures FY 16 NJ CASE		Matching or other funds supporting local CASE program	Total (column 2+3) (Final Expenditures)
A.	CASE Class/Lab Equipment/Supplies Summary/total only		\$		\$	\$
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: