

Revised July 6, 2016

*The College reserves the right to change information in this document prior to the printing of a new catalog.

CATALOG ADDENDUM

2016-17



EMMANUEL COLLEGE
FRANKLIN SPRINGS, GEORGIA 30639

Emmanuel College is accredited by
The Southern Association of Colleges and Schools
Commission on Colleges
to award the associate and baccalaureate degrees.
Contact the Commission on Colleges at
1866 Southern Lane, Decatur, Georgia 30033-4097;
Telephone number 404-679-4500
for questions about the accreditation of Emmanuel College.
Website: www.sacscoc.org

Revised July 6, 2016

*The College reserves the right to change information in this document prior to the printing of a new catalog.

Programs of Study:

Diversified Agriculture

Agricultural Business

Agricultural Missions

Agricultural Science

DIVERSIFIED AGRICULTURE

PURPOSE

Motto: "Cultivating for His Kingdom"

With this motto, the Diversified Agriculture program at Emmanuel College is designed to prepare students to be leaders and visionaries in various fields of agricultural study as well as to fulfill their goal of joining the Agriculture workforce. Students will gain hands-on experiences in the field of Agriculture, form partnerships with Agriculture professionals, develop networking opportunities with Agriculture policy makers, and secure potential employment opportunities through internships.

Students may select one of three concentrations in the Diversified Agriculture major: Business, Missions, or Science. Those selecting the *Business concentration* will be able to pursue the business side of agriculture and will complement their direct study in agriculture courses with general classes in business that have broad application to the agriculture industry, as well as classes specific to agricultural business. Those selecting the *Missions concentration* will find courses that will fulfill a desire to be engaged with agricultural production and marketing while simultaneously practicing ministry on the mission field. Thus, students will complement their direct study in agriculture courses with studies in Christian ministries. Finally, those selecting the *Science concentration* will study the science side of agriculture for the purpose of engaging in basic and applied agricultural science research. Thus, students will complement their direct study in agriculture courses with classes in science that have broad application to agricultural science, as well as classes specific to agricultural science.

Student Learning Outcomes

I. Graduates with a degree in Diversified Agriculture (*all concentrations*) should be able to:

1. Demonstrate a proficient knowledge base in the field of agriculture.
2. Articulate the global, diverse nature of agriculture, as well as the legal and ethical environment impacting agriculture in all fields.

3. Communicate the subject of agriculture effectively both orally and in writing in a business, missions, or science setting.

4. Demonstrate problem solving skills in the field of agriculture and the ability to construct solutions that are viable and ethical, including but not limited to, the ability to analyze current events and determine the future of agriculture using historical trends, research and practical solutions.

5. Exhibit the ability to work with others to provide a unified and practical scientific approach to our earth, its resources, and the use of God's creation.

II. Graduates with a degree in Diversified Agriculture with a concentration in Business should be able to:

6. Articulate common business practices in agriculture and make effective and profitable agricultural business decisions.

III. Graduates with a degree in Diversified Agriculture with a concentration in Missions should be able to:

7. Accomplish his/her mission-oriented goal of presenting God's plan to unbelievers by using 1) agricultural techniques and skills to teach others around the world about agriculture and 2) one's well-rounded Biblical and theological knowledge and sound Biblical interpretation skills.

IV. Graduates with a degree in Diversified Agriculture with a concentration in Science should be able to:

8. Investigate techniques used in agriculture to develop solutions and create new discoveries and demonstrate competency in both laboratory and field-based techniques used in modern agricultural systems.

9. Demonstrate competency in research techniques used in agriculture through experimentation and use of multiple literature sources to find, analyze, organize, and manage information related to diverse agriculture systems.

GRADUATION REQUIREMENTS

In order to graduate with a Diversified Agriculture degree, a student must:

1. Complete the requirements listed below for the curriculum, for a total number of at least 124 semester hours.
2. Earn a minimum grade point average of 2.00 for ALL course work taken. NO grade below "C-" in required courses (those listed under Major Lower and Upper Level Courses, as well as prerequisite courses included in the Liberal Arts Core) will be accepted for graduation credit. In the event a grade of "D" or lower is earned in any required course, that course must be retaken until a grade of "C-" or higher is earned.
3. Meet all other college graduation requirements listed under Requirements of Graduation in this catalog.

DIVERSIFIED AGRICULTURE**MAJOR****Agricultural Business Concentration****LIBERAL ARTS CORE**

Communication Skills

EN101, 102 (Freshman Composition)	6 hrs.
CM130 (Intro to Communication)	3 hrs.

Humanities

Literature	3 hrs.
Art-Music Appreciation/Philosophy	
Theater/Foreign Language/Literature	3 hrs.

Social & Behavioral Sciences

History	3 hrs.
Political Science/Psychology/Sociology/ Economics/Geography	3 hrs.

Natural Sciences/Mathematical Reasoning

BIO 111 (Biology I)	3 hrs.
BIO 111L (Biology I Lab)	1 hr.
MA 124/124I (College Algebra)	3 hrs.

Christian Ministries

BI 111 (Biblical Literature & History)	3 hrs.
BI 112 (Interpreting Biblical Literature)	3 hrs.

BI 300 (Gospel of John)	3 hrs.
TH 237 (Christian Ethics)	3 hrs.

Physical Wellness

PE 105 (Total Fitness)	1 hr.
FS101 (Freshman Seminar)	2 hrs.
SS 400 (Professions, Vocations, Missions)	1 hr.

Total 44 hrs.

MAJOR LOWER AND UPPER LEVEL COURSES

Foundation Courses

Mathematics

MA 200 (Statistics)	3 hrs.
---------------------	--------

Natural Science

BIO 112 (Biology II)	3 hrs.
BIO 112L (Biology II Lab)	1 hr.

Agriculture Courses

AG 101 (Introduction to Agriculture)	1 hr.
AG 105 (Basic Agriculture Science)	3 hrs.
AG 201 (Ag Operation/Experience)	1 hr.
AG 205 (Greenhouse Operations)	3 hrs.
AG 301 (Crop Science)	4 hrs.
AG 302 (Biology, Care/Production)	4 hrs.
AG 303 (Fruit and Vegetable Production)	3 hrs.
AG 405 (Agriculture Directed Study)	2 hrs.
AG 407 (Agriculture Seminar)	2 hrs.
AG 410 (Agriculture Internship)	2 hrs.

Agricultural Business Courses

AG 305 (Agricultural Economics/Finance)	3 hrs.
AG 401 (Marketing of Ag Products)	3 hrs.
AG 404 (Ag Processing/Marketing)	3 hrs.
Agriculture Electives	6 hrs.
BU 201 (Microeconomics)	3 hrs.
BU 260 (Financial Accounting)	3 hrs.
BU 300 (Management)	3 hrs.
BU 310 (Business Law)	3 hrs.
BU 325 (Entrepreneurship)	3 hrs.
BU 360 (Business Communication)	3 hrs.
CM 320 (Public Relations)	3 hrs.
Business Electives	6 hrs.

General Electives 6 hrs.

TOTAL 124 hrs.

DIVERSIFIED AGRICULTURE**MAJOR****Agricultural Missions Concentration**

LIBERAL ARTS CORE

Communication Skills

EN101, 102 (Freshman Composition)	6 hrs.
CM130 (Intro to Communication)	3 hrs.

Humanities

Literature	3 hrs.
Art-Music Appreciation/Philosophy	
Theater/Foreign Language/Literature	3 hrs.

Social & Behavioral Sciences

History	3 hrs.
Political Science/Psychology/Sociology/ Economics/Geography	3 hrs.

Natural Sciences/Mathematical Reasoning

BIO 111 (Biology I)	3 hrs.
BIO 111L (Biology I Lab)	1 hr.
Mathematics	3 hrs.

Christian Ministries

BI 140 (Old Testament Survey)	3 hrs.
BI 141 (New Testament Survey)	3 hrs.
BI 300 (Gospel of John)	3 hrs.
TH 237 (Christian Ethics)	3 hrs.

Physical Wellness

PE 105 (Total Fitness)	1 hr.
------------------------	-------

FS101 (Freshman Seminar)	2 hrs.
SS 400 (Professions, Vocations, Missions)	1 hr.

Total	44 hrs.
-------	---------

MAJOR LOWER AND UPPER LEVEL COURSES

Foundation Courses

Mathematics

MA 200 (Statistics)	3 hrs.
---------------------	--------

Natural Science

BIO 112 (Biology II)	3 hrs.
BIO 112L (Biology II Lab)	1 hr.

Agriculture Courses

AG 101 (Introduction to Agriculture)	1 hr.
AG 105 (Basic Agriculture Science)	3 hrs.

AG 201 (Ag Operation/Experience)	1 hrs.
AG 205 (Greenhouse Operations)	3 hrs.
AG 301 (Crop Science)	4 hrs.
AG 302 (Biology, Care/Production)	4 hrs.
AG 303 (Fruit and Vegetable Production)	3 hrs.
AG 405 (Agriculture Directed Study)	2 hrs.
AG 407 (Agriculture Seminar)	2 hrs.
AG 410 (Agriculture Internship)	2 hrs.

Agricultural Missions Courses

AG 401 (Marketing of Ag Products)	3 hrs.
AG 402 (Insect/Disease Management)	3 hrs.
AG 414 (Agricultural Missions)	3 hrs.
Agriculture Electives	3 hrs.
BI 275 (Biblical Interpretation)	3 hrs.
Bible Electives	9 hrs.
(At least one course Old Testament, one New Testament)	
MN 101 (Christian Ministry)	3 hrs.
MN 102/301 (Christian Service Practicum)	NC
MN 315 (Communicating Scripture) OR	
MN 361 (Church Leadership I)	3 hrs.
MN 470 (Pastoral Care and Counseling) OR	
MN 475 (Marriage/Family Counseling)	3 hrs.
MN 496 (Internship)	6 hrs.
MS 330 (Global Missions)	3 hrs.
PY 410 (Spiritual Formation I)	3 hrs.
TH 260 (Church Doctrines)	3 hrs.

TOTAL	124 hrs.
-------	----------

DIVERSIFIED AGRICULTURE**MAJOR****Agricultural Science Concentration**

LIBERAL ARTS CORE

Communication Skills

EN101, 102 (Freshman Composition)	6 hrs.
CM130 (Intro to Communication)	3 hrs.

Humanities

Literature	3 hrs.
Art-Music Appreciation/Philosophy	
Theater/Foreign Language/Literature	3 hrs.

Social & Behavioral Sciences

History	3 hrs.
Political Science/Psychology/Sociology/ Economics/Geography	3 hrs.

Natural Sciences/Mathematical Reasoning

BIO 111 (Biology I)	3 hrs.
BIO 111L (Biology I Lab)	1 hr.
MA 125 (Trigonometry)	3 hrs.

Christian Ministries

BI 111 (Biblical Literature & History)	3 hrs.
BI 112 (Interpreting Biblical Literature)	3 hrs.
BI 300 (Gospel of John)	3 hrs.
TH 237 (Christian Ethics)	3 hrs.

Physical Wellness

PE 105 (Total Fitness)	1 hr.
------------------------	-------

FS101 (Freshman Seminar)	2 hrs.
SS 400 (Professions, Vocations, Missions)	1 hr.

Total 44 hrs.

MAJOR LOWER AND UPPER LEVEL COURSES

Foundation Courses

Mathematics

MA 200 (Statistics)	3 hrs.
---------------------	--------

Natural Science

BIO 112 (Biology II)	3 hrs.
BIO 112L (Biology II Lab)	1 hr.

Agriculture Courses

AG 101 (Introduction to Agriculture)	1 hr.
AG 105 (Basic Agriculture Science)	3 hrs.

AG 201 (Ag Operation/Experience)	1 hrs.
AG 205 (Greenhouse Operations)	3 hrs.
AG 301 (Crop Science)	4 hrs.
AG 302 (Biology, Care/Production)	4 hrs.
AG 303 (Fruit and Vegetable Production)	3 hrs.
AG 405 (Agriculture Directed Study)	2 hrs.
AG 407 (Agriculture Seminar)	2 hrs.
AG 410 (Agriculture Internship)	2 hrs.

Agricultural Science Courses

AG 402 (Insect/Disease Management)	3 hrs.
AG 403 (Advanced Animal Science)	3 hrs.
AG 404 (Ag Processing/Marketing)	3 hrs.
Agriculture Electives	3 hrs.
CHM 220 (Chemistry I)	3 hrs.
CHM 220L (Chemistry I Lab)	1 hr.
CHM 221 (Chemistry II)	3 hrs.
CHM 221 L (Chemistry II Lab)	1 hr.
SC 240 (Physics I)	4 hrs.
SC 340 (Microbiology)	4 hrs.
SC 351 (Intro to Research)	2 hrs.
SC 352 (Directed Research)	2 hrs.
SC 359 (Environmental Science)	3 hrs.

General Electives 13 hrs.

TOTAL 124 hrs.

AGRICULTURE

AG 101 Introduction to Agriculture (Fall) 1 hr.

The course will review the role of Agriculture and Natural Resources in human history, present and future. Discussion will include current opportunities and future activities in the field of agriculture.

AG 105 Basic Agriculture Science (Spring) 3 hrs.

This course is designed as the foundational course for all Agriculture students. The course introduces the major areas of scientific agricultural production and research; presents problem solving lessons and introductory skills and knowledge in agricultural science and ag-related technologies. Classroom and laboratory activities are supplemented through agricultural experiences and leadership programs and activities. Classroom discussion, lecture, and practical experience are used to familiarize the students with Agriculture, Natural Resources and Forestry. Laboratories will develop understanding and competency in operating equipment at the classroom labs. Students will receive instruction in agricultural safety to develop an understanding and competency in the areas of current agricultural production practices and safety procedures.

AG 201 Agricultural Operation and Experience (Fall) 1 hr.

This course is designed to give students the opportunity to develop additional skills and proficiencies in agricultural operations. Students will be required to perform hands on experiences on a working farm while developing solutions for the management and care of the operation.

AG 205 Greenhouse Operations (Spring) 3 hrs.

Students will develop hands on activities in the techniques and principles of plant propagation by seeds, grafts, buds, cuttings, layers and division. Fundamentals of greenhouse management and construction will be included along with marketing, wholesale and commercial sales and new innovations in the green industry.

AG 301 Crop Science (Fall) 4 hrs.

An introduction to the fundamentals of crop growth and the study of the more important field crops. Emphasis will be placed on the effects of various cultural practices on the plant growth. Crop distribution and breeding will be considered. Cropping systems will be developed and analyzed. Prerequisite: Biology 112.

AG 302 Biology, Care, and Production of Domestic Animals (Spring) 4 hrs.

Students will study and become proficient in the history, management, physiology, breeding, lactation, feeding, health, and products of cattle, swine, sheep, poultry, companion animals, and other species as they relate to humans and the creation. Prerequisite: AG 101

AG 303 Fruit and Vegetable Production (Spring) 3 hrs.

This course is a study of scientific principles impacting fruit and vegetable production. Breeding and selection, asexual techniques, and development of fruiting and vegetative bodies will be included. Adaptation, cultural practices, and storage of major fruit and vegetable species will be considered. Prerequisite: AG 301.

AG 305 Agricultural Economics and Finance (Fall) 3 hrs.

This course will provide knowledge (in theory and practice) of agricultural commodity, resource and financial markets for small as well as medium-to-large size markets (including Agri-business models). In addition, emphasis will be placed on agricultural financial planning and means of financing agricultural operations. Pre-requisites: BU201 and BU 260.

AG 306 Agricultural Operation and Experience II (Per student demand) 1 hr.

This course is designed to give students the opportunity to develop advanced skills and proficiencies in agricultural operations. Students will be required to perform hands on experiences on a working farm while developing solutions for the management and care of the operation.

AG 401 Marketing of Agricultural Products (Fall) 3 hrs.

An analysis of agricultural marketing systems, factors determining agricultural prices, and farmer marketing management. Topics include setting marketing goals, government price institutions, contract and futures markets, and marketing under risk and uncertainty. Students will develop an agriculture product, create an advertising campaign and implement a marketing plan. Prerequisites: AG 101, AG 302, BU201.

AG 402 Insect and Disease Management (Fall) 3 hrs.

An overview of the types of organisms causing harm to plants and a presentation of management concepts for pests and diseases, related safety and environmental concerns, laws, and regulations. Prerequisite: AG 303.

AG 403 Advanced Animal Science (Fall) 3 hrs.

A combined lecture and lab course, this course is presented with the agriculture student in mind. The first unit, Physiology, addresses cellular digestion, reproduction, genetics and ecology. The second unit, Applications, teaches the practical application of animal science. The third unit instructs students in the interpretation of performance data for judging and evaluating livestock.

AG 404 Agriculture Processing and Marketing (Spring) 3 hrs.

This course provides students with many hands on opportunities in the area of processing and marketing of agriculture products. Students will study of slaughtering, grading, cutting, processing, identification, buying and cooking of cuts of meat, vegetables, fruits and timber. The exploration, analysis and application of marketing principles for agriculture products will be utilized in this course.

AG 405 Directed Study-Project Component (Fall) 2 hrs.

Students, working in groups of two or three, will collect and analyze data on a specific issue in one of the areas of agriculture business, missions or science, evaluate the findings from a Christian perspective, and present their results in written and oral form. Prerequisite; AG 101, AG 201, AG 301 or SC 215, AG 302, BU 201. Junior or Senior only.

AG 406 Environmental and Natural Resources (Per student demand) 3 hrs.

Students will evaluate agriculture production practices and explore the environmental impact those systems have on our earth and its resources. The relationship between biological systems, the use of inputs and outputs in agriculture and the interface between plants and animals will be explored.

AG 407 Agriculture Seminar (Spring) 2 hrs.

This course provides students the opportunity to collect, discuss, interpret, and defend current issues that affect agricultural business, missions and science through economic, environmental and social conditions and the production of agricultural commodities.

AG 410 Agriculture Internship (Fall, Spring, Summer) 2 hrs.

A student initiated, designed, and executed occupational learning experience in one of the concentrations of business, missions or science. On-the-job work experiences are integrated with educational objectives to give students an opportunity to broaden their learning experiences. Seniors only, minimum 30 hours work experience. All students will prepare and present a summary of experiences to faculty and undergraduates.

AG 411 Agriculture Internship II (Per student demand) 2 hrs.

A student initiated, designed, and executed international occupational learning experience. On-the-job work experiences are integrated with educational objectives to give students an opportunity to broaden their global learning experiences. Seniors only, minimum 30 hours work experience. All students will

prepare and present a summary of experiences to faculty and undergraduates.

AG 413 Special Topics in Agriculture Business
(Per student demand) 3-6 hrs.

This is a flexible course ranging from 3 to 6 credit hours, for the purpose of special studies in agriculture business processes, marketing, management, financial studies, accounting, advertising and banking. The student must be of junior or senior standing, and must have approval of the instructor and department chair in order to take the course.

AG 414 Special Topics in Agriculture Missions (Fall) 3-6 hrs.

This is a flexible course ranging from 3 to 6 credit hours, for the purpose of special studies in agriculture missions. The student must be of junior or senior standing.

AG 415 Special Topics in Agriculture Science
(Per student demand) 3-6 hrs.

This is a flexible course ranging from 3 to 6 credit hours, for the purpose of special studies in agriculture science. The student must be of junior or senior standing, and must have approval of the instructor and department chair in order to take the course.