Department of Agriculture, Nutrition and Human Ecology

Purpose and Goal
The Agriculture program prepares the graduate to perform as an entry level professional in a broad range of areas including food, agricultural, and natural resources marketing, production, distribution and processing. The Agriculture degree program is designed to provide a generalist emphasis that serves as the foundation for diverse careers and as a springboard for advanced study in agriculture and natural resources sciences and related fields. Concentrations are available in Agribusiness, Plant and Soil Sciences, and Animal and Food Sciences. These concentrations guide the student in defining an area for future specialization that can be attained at the graduate level and through professional practice. The emphasis in Animal and Food Sciences also may serve as pre-professional curricula for Veterinary Medicine. Additional courses that help the student qualify for professional study in veterinary medicine should be selected in consultation with an advisor.

Students enrolled in Agriculture are afforded opportunities to gain hands-on experience through laboratory, field exercises, cooperative education and summer job assignments. Students completing the program are able to demonstrate varied skills in many areas. Guidance and support are provided to foster personal development and leadership skills essential for effective professional practice in the chosen field of practice.

The Human Nutrition and Food program is designed to provide quality nutrition education to students who wish to pursue careers in the field of nutrition. There are three concentrations with defined emphasis on Health and Wellness, Food Systems Management and Registered Dietitian. The Health and Wellness concentration prepares students for careers in nursing or the adult care environment, hospitals, health inspections and fitness. Courses in this concentration are designed to help students understand and implement health promotion and disease prevention, and promote healthy lifestyles through behavioral changes. The Food Service Management concentration prepares students for careers as dietary managers who will provide leadership in the delivery of food service management. It is dedicated to studying the operational issues that lead to profitability in a food service operation. Students examine the food service industry from the perspective of management. Student learn about food preparation and leadership knowledge and skills that will help to further their careers in the hospitality industry. The Registered Dietitian concentration provides an avenue toward the eligibility of students to become registered dietitians.

The Human Nutrition and Food program is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), 120 South Riverside Plaza, Suite 2000, Chicago, Illinois 60606-6695; Telephone: 800-877-1600 ext. 5400. Website http://www.eatright.org. Graduates in Human Sciences and Dietetics are positioned to provide services to individuals, families and their communities and to help effect an optimum balance between families and their environments. The graduate has the expertise to focus on family-community interactions, family problems and needs, the identification and efficient utilization of resources available to the individual and the family as consumer, and the components for optimal development of persons in our society.

Bachelor of Science in Agriculture Degree Program
The degree program in Agriculture is a generalist program that provides a broad based study of the food, agricultural and natural resources sciences. The Concentration options allow the student to gain depth in a specialty area and build the foundation for graduate study in the field. Each student must select one of the Concentration options in order to complete requirements for the degree, B.S. in Agriculture.

Degree Program Requirements

<table>
<thead>
<tr>
<th>Core Curriculum</th>
<th>42</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Program Requirements</td>
<td></td>
</tr>
<tr>
<td>AGEC 1233</td>
<td>Fundamentals of Agricultural Economics</td>
</tr>
<tr>
<td>AGEC 2213</td>
<td>Marketing Agricultural Products</td>
</tr>
<tr>
<td>AGEC 3223</td>
<td>Agricultural Financial Analysis</td>
</tr>
<tr>
<td>AGEG 1413</td>
<td>Fundamentals of Agricultural Engineering</td>
</tr>
<tr>
<td>AGHR 1313</td>
<td>Agricultural Science and Technology</td>
</tr>
<tr>
<td>AGHR 4413</td>
<td>Special Topics</td>
</tr>
<tr>
<td>AGRO 1703</td>
<td>Crop Science</td>
</tr>
<tr>
<td>AGRO 2603</td>
<td>Environmental Soil Science</td>
</tr>
<tr>
<td>AGRO 2633</td>
<td>Forage and Pasture Management</td>
</tr>
<tr>
<td>ANSC 1513</td>
<td>General Animal Science</td>
</tr>
<tr>
<td>ANSC 2513</td>
<td>Animal Production and Marketing</td>
</tr>
<tr>
<td>ANSC 2543</td>
<td>Diseases and Sanitation</td>
</tr>
<tr>
<td>Concentration</td>
<td>42</td>
</tr>
<tr>
<td>Total Hours</td>
<td>120</td>
</tr>
</tbody>
</table>
Concentration Options

Agribusiness

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC 2223</td>
<td>Food Distribution Systems</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 3213</td>
<td>Agricultural Policy</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 4223</td>
<td>Principles of Agri-business Management</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 4233</td>
<td>Land and Resource Economics</td>
<td>3</td>
</tr>
<tr>
<td>AGEC 4253</td>
<td>Agricultural Prices</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2113</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ECON 4213</td>
<td>Intermediate Microeconomic Analysis</td>
<td>3</td>
</tr>
<tr>
<td>MATH 2003</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 1013</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 3103</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Unrestricted Electives</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>42</td>
</tr>
</tbody>
</table>

Plant and Soil Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGRO 2613</td>
<td>Natural Resource Conservation Management</td>
<td>3</td>
</tr>
<tr>
<td>AGRO 2733</td>
<td>Principles of Crop Production</td>
<td>3</td>
</tr>
<tr>
<td>AGRO 3623</td>
<td>Soil Morphology and Classification</td>
<td>3</td>
</tr>
<tr>
<td>AGRO 3633</td>
<td>Soil Fertility and Fertilizers</td>
<td>3</td>
</tr>
<tr>
<td>AGRO 3643</td>
<td>Soil and Water Management</td>
<td>3</td>
</tr>
<tr>
<td>AGRO 3713</td>
<td>Gen Entomology</td>
<td>3</td>
</tr>
<tr>
<td>AGRO 3733</td>
<td>Plant Pathology</td>
<td>3</td>
</tr>
<tr>
<td>AGRO 4613</td>
<td>Soil Microbiology</td>
<td>3</td>
</tr>
<tr>
<td>AGRO 4623</td>
<td>Environmental Science</td>
<td>3</td>
</tr>
<tr>
<td>GEOG 2113</td>
<td>Introduction to Geographic Information System</td>
<td>3</td>
</tr>
<tr>
<td>Unrestricted Electives</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>42</td>
</tr>
</tbody>
</table>

1 Consult an advisor. Additional semester credit hours may be required for specialized job requirements. Examples include: BIOL 1034; MATH 1123.

Animal and Food Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSC 2523</td>
<td>Poultry Science</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 2533</td>
<td>Dairy Science</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 2552</td>
<td>Poultry Tech &amp; Marketing</td>
<td>2</td>
</tr>
<tr>
<td>ANSC 3503</td>
<td>Animal Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 3514</td>
<td>Anatomy and Physiology</td>
<td>4</td>
</tr>
<tr>
<td>ANSC 3523</td>
<td>Meat Science</td>
<td>3</td>
</tr>
<tr>
<td>ANSC 4533</td>
<td>Breeding/Genetics</td>
<td>3</td>
</tr>
<tr>
<td>FDSC 3583</td>
<td>Food Quality Assurance and Sanitation</td>
<td>3</td>
</tr>
<tr>
<td>FDSC 3593</td>
<td>Food Bacteriology</td>
<td>3</td>
</tr>
<tr>
<td>FDSC 4573</td>
<td>Food Processing and Engineering</td>
<td>3</td>
</tr>
<tr>
<td>Targeted Electives</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>42</td>
</tr>
</tbody>
</table>

2 Consult an advisor. Targeted elective suggestions for students who desire to attend Veterinary Medicine School (Any 12 SCH): BIOL 4012; CHEM 1043; CHEM 2033; PHYS 2113; PHYS 2123; BIOL 3064. Students who have no desire to attend Veterinary Medicine School will be advised to take other courses offered within the CAHS.

Minor Requirements (24 SCH)

Select 12 SCH lower division courses plus 12 SCH upper division courses in consultation with an advisor.
Bachelor of Science in Dietetics with a major in Human Nutrition and Food

The BS degree in Dietetics prepares students for careers in varying fields in hospitals and wellness, food service & management, agriculture, and other related fields. Students can concentrate in one of three areas in the department, Health and Wellness, Food Service Management and Registered Dietitian (RD). The RD concentration, is designed to provide quality dietetic education that enhances student development and provides an avenue toward the eligibility of students to become registered dietitians. The Didactic Program in Dietetics at Prairie View A&M University is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), 120 South Riverside Plaza, Suite 2000, Chicago, Illinois 60606-6695; Telephone 800-877-1600 ext. 5400. Website http://www.eatright.org.

Verification Letter

Students must successfully complete the Registered Dietitian concentration of the BS in Dietetics degree with a major in Human Nutrition and Food to qualify to receive a verification statement. In addition, students must graduate with at least a 3.0 GPA in major and Support Area Requirements with a grade of “C” or better in each course. In instances where courses are substituted or completed as independent study in the department, the student is required to take and successfully complete an examination covering the relevant knowledge and competencies in those areas. If all of the above criteria are met, the program will issue a verification statement to the student. Verification Statements are issued upon certification of completion of all degree requirements by the registrar's office. Verification statements will only be issued upon completion of the Registered Dietitian (RD) concentration.

Degree Program Requirements

Core Curriculum

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1123</td>
<td>Freshman Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENGL 1133</td>
<td>Freshman Composition II</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1113</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1033</td>
<td>General Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1054</td>
<td>Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Language, Philosophy and Culture</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Creative Arts</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1313</td>
<td>U.S. to 1876</td>
<td>3</td>
</tr>
<tr>
<td>HIST 1323</td>
<td>U.S. 1876 to Present</td>
<td>3</td>
</tr>
<tr>
<td>POSC 1113</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>POSC 1123</td>
<td>Texas Government</td>
<td>3</td>
</tr>
<tr>
<td>SOCG 1013</td>
<td>General Sociology</td>
<td>3</td>
</tr>
<tr>
<td>or PSYC 1113</td>
<td>General Psychology</td>
<td></td>
</tr>
<tr>
<td>ECON 2003</td>
<td>Fundamentals of Economics in a Global Society</td>
<td>3</td>
</tr>
<tr>
<td>COMP 1003</td>
<td>Digital Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUNF 1301</td>
<td>Introduction to Dietetics</td>
<td>1</td>
</tr>
<tr>
<td>HUNF 1343</td>
<td>Nutrition and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 2533</td>
<td>Intermediate Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 2633</td>
<td>Food Service Systems</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 2653</td>
<td>Food Principles and Meal Management</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 2663</td>
<td>Food Systems Management</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 3603</td>
<td>Nutritional Biochemistry</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 3613</td>
<td>Nutrition Throughout the Lifecycle</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 3633</td>
<td>Advanced Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 3643</td>
<td>Food and Culture</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 3653</td>
<td>Nutrition and Disease</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 3673</td>
<td>Nutritional Assessment</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 4303</td>
<td>Human Nutrition and Food Practicum</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 4603</td>
<td>Physiochemical Aspects of Food</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 4613</td>
<td>Research in Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 4693</td>
<td>Community Nutrition and Health</td>
<td>3</td>
</tr>
</tbody>
</table>

Concentration: Select one from the options below

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
</table>

Total Hours: 120
Three hours of BIOL 1054 Human Anatomy & Physiology I counts toward the core curriculum and one hour of BIOL 1054 Human Anatomy & Physiology I counts toward the concentration.

See the core curriculum section for course options.

### Registered Dietitian Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUNF 4473</td>
<td>Nutrition Counseling</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 4663</td>
<td>Medical Nutrition Therapy I</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 4673</td>
<td>Medical Nutrition Therapy II</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1054</td>
<td>Anatomy and Physiology I</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1064</td>
<td>Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 1043</td>
<td>General Inorganic Chemistry</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 2033</td>
<td>General Organic Chemistry I</td>
<td>3</td>
</tr>
</tbody>
</table>

**Support Area Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2003</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 1013</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1003</td>
<td>Fundamentals of Speech Comm</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1073</td>
<td>General Microbiology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours**

32

### Wellness Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1054</td>
<td>Anatomy and Physiology I</td>
<td>1</td>
</tr>
<tr>
<td>BIOL 1064</td>
<td>Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>HUNF 4473</td>
<td>Nutrition Counseling</td>
<td>3</td>
</tr>
<tr>
<td>or HUNF 4413</td>
<td>Special Topics in Nutrition</td>
<td></td>
</tr>
<tr>
<td>HUNF 4663</td>
<td>Medical Nutrition Therapy I</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 4673</td>
<td>Medical Nutrition Therapy II</td>
<td>3</td>
</tr>
<tr>
<td>HLTH 3043</td>
<td>Consumer Health</td>
<td>3</td>
</tr>
<tr>
<td>KINE 4042</td>
<td>Athletic Injuries and CPR</td>
<td>2</td>
</tr>
</tbody>
</table>

**Support Area Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2003</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 1013</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1011</td>
<td>Inorganic Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>or CHEM 1051</td>
<td>General Inorganic Chemistry Laboratory</td>
<td></td>
</tr>
<tr>
<td>COMM 1003</td>
<td>Fundamentals of Speech Comm</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1073</td>
<td>General Microbiology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours**

32

### Food Service Management Concentration

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1054</td>
<td>Anatomy and Physiology I</td>
<td>1</td>
</tr>
<tr>
<td>FDSC 3583</td>
<td>Food Quality Assurance and Sanitation</td>
<td>3</td>
</tr>
<tr>
<td>FDSC 3593</td>
<td>Food Bacteriology</td>
<td>3</td>
</tr>
<tr>
<td>ACCT 2113</td>
<td>Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 3103</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 3353</td>
<td>Human Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>MRKT 3103</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Support Area Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH 2003</td>
<td>Elementary Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 1013</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1011</td>
<td>Inorganic Chemistry Laboratory I</td>
<td>1</td>
</tr>
<tr>
<td>COMM 1003</td>
<td>Fundamentals of Speech Comm</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1073</td>
<td>General Microbiology</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total Hours**

32
### Minor Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUNF 1343</td>
<td>Nutrition and Wellness</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 2633</td>
<td>Food Service Systems</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 2653</td>
<td>Food Principles and Meal Management</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 2663</td>
<td>Food Systems Management</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 3613</td>
<td>Nutrition Throughout the Lifecycle</td>
<td>3</td>
</tr>
<tr>
<td>HUNF 4693</td>
<td>Community Nutrition and Health</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

### Master of Science in Human Sciences Degree Program Requirements

This program seeks to train systemically focused clinicians that are prepared to meet the complex demands of the 21st Century family in its many forms. Through both theoretical knowledge and clinical practice, the degree underscores the importance of traditionally marginalized populations and their role in therapy. Through the program, students will acquire necessary skills to work systemically with individuals, couples, and families. This systemic lens will prepare students to work with a variety of mental health issues.

#### Core

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUSC 5393</td>
<td>Family Communication</td>
<td>3</td>
</tr>
<tr>
<td>HUSC 5533</td>
<td>Family Theory and Issues</td>
<td>3</td>
</tr>
<tr>
<td>HUSC 5543</td>
<td>Theories of Child Development</td>
<td>3</td>
</tr>
<tr>
<td>HUSC 5553</td>
<td>Human Development</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Electives

Select 18 semester credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUSC 5323</td>
<td>Marriage and Family Therapy Pre-Practicum</td>
<td></td>
</tr>
<tr>
<td>HUSC 5333</td>
<td>Introduction to Clinical Hypnosis</td>
<td></td>
</tr>
<tr>
<td>HUSC 5346</td>
<td>Marriage and Family Therapy Practicum II</td>
<td></td>
</tr>
<tr>
<td>HUSC 5373</td>
<td>Sex Therapy</td>
<td></td>
</tr>
<tr>
<td>HUSC 5383</td>
<td>Child and Adolescent Therapy</td>
<td></td>
</tr>
<tr>
<td>HUSC 5523</td>
<td>Marriage and Family Therapy</td>
<td></td>
</tr>
<tr>
<td>HUSC 5563</td>
<td>Marriage and Family Therapy Practicum I</td>
<td></td>
</tr>
<tr>
<td>HUSC 5573</td>
<td>Theories of Personality</td>
<td></td>
</tr>
<tr>
<td>HUSC 5583</td>
<td>Mental Health and Psychopathology</td>
<td></td>
</tr>
<tr>
<td>HUSC 5593</td>
<td>Clinical Supervision</td>
<td></td>
</tr>
<tr>
<td>HUSC 5613</td>
<td>Victimization and Crisis Management</td>
<td></td>
</tr>
<tr>
<td>HUSC 5623</td>
<td>Counseling Diverse Populations</td>
<td></td>
</tr>
<tr>
<td>HUSC 5633</td>
<td>Clinical Assessment</td>
<td></td>
</tr>
<tr>
<td>HUSC 5683</td>
<td>Family Ethics and Issues</td>
<td></td>
</tr>
<tr>
<td>HUSC 5713</td>
<td>Group Therapy</td>
<td></td>
</tr>
<tr>
<td>HUSC 5723</td>
<td>Family Financial Counseling</td>
<td></td>
</tr>
<tr>
<td>HUSC 5733</td>
<td>Special Topics</td>
<td></td>
</tr>
<tr>
<td>HUSC 5743</td>
<td>Addiction and Family Intervention</td>
<td></td>
</tr>
<tr>
<td>HUSC 5753</td>
<td>Individual and Clinical Psychotherapy</td>
<td></td>
</tr>
</tbody>
</table>

#### Research

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUSC 5343</td>
<td>Research Problems</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Resource

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUSC 5693</td>
<td>Thesis</td>
<td>3</td>
</tr>
<tr>
<td>or HUSC 5563</td>
<td>Marriage and Family Therapy Practicum I</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Hours</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

1 This course may be taken as an elective if the student takes HUSC 5693 Thesis as their Resource requirement.
Graduate Certificate in Dietetics Requirements
The Graduate Certificate in Dietetics is offered for individuals accepted for matriculation in the Dietetic Internship. The following courses are required as components of the certificate program:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUSC 5326</td>
<td>Advanced Practice in Dietetics I</td>
<td>6</td>
</tr>
<tr>
<td>HUSC 5336</td>
<td>Advanced Practice in Dietetics II</td>
<td>6</td>
</tr>
<tr>
<td>HUSC 5353</td>
<td>Dietetic Seminar I</td>
<td>3</td>
</tr>
<tr>
<td>HUSC 5363</td>
<td>Dietetic Seminar II</td>
<td>3</td>
</tr>
</tbody>
</table>

The Dietetic Internship Program at Prairie View A&M University is accredited by the Commission on Accreditation for Dietetics Education (CADE) of the American Dietetic Association (ADA). The address and phone number of CADE are 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6695, 1-800-877-1600 Ext. 5400. Website http://www.eatright.org.

Ag and Human Resources Courses

AGHR 1303 Land Grant System and Global Food Security: 3 semester hours.
This course is designed to provide students critical insight and practical knowledge regarding the land grant mission, created by the Morrill Act passed by Congress in 1862 and 1890. Issues, challenges and proposed solutions related to global food security and sustainable food programs will be emphasized through evaluation of data and public research. In assessing and evaluating specific global issues.

AGHR 1313 Agricultural Science and Technology: 3 semester hours.
Introduction to professions in agricultural sciences and technology. Importance of agriculture in the state, nation and world. Review of research developments; explorations of career and other opportunities and development of human resource skills needed in agriculture.

AGHR 3323 Program Planning: 3 semester hours.
The application of strategies appropriate for delivering agriculture and human resource concepts to varied audiences. This includes the use of media, materials and supplies; procedures for management, motivation and evaluation.
Prerequisites: AGHR 1313.

AGHR 3793 Cooperative Occupational Experience in Agriculture: 3 semester hours.
Pre-baccalaureate work experience in the food and agriculture sciences commensurate with the student's academic emphasis. Written report of activities consistent with program guidelines upon completion of experience. A minimum of 100 clock hours of supervised work activities is required.

AGHR 3996 Cooperative Occupational Experience in Agriculture: 6 semester hours.
Pre-baccalaureate work experience in the food and agricultural sciences commensurate with the student's academic emphasis. Written report of activities consistent with program guidelines upon completion of experience. A minimum of 200 clock hours of supervised work activities are required.

AGHR 4413 Special Topics: 3 semester hours.
Study of a problem affecting some aspect of the food and agricultural science industry. Reports, discussion and major paper required. Repeatable for up to 6 semester credit hours.

AGHR 4992 Independent Study: 2 semester hours.
Readings, research and/or field work on selected topics. Prerequisite: Advisor consent.

AGHR 4993 Independent Study: 3 semester hours.
Readings, research and/or field work on selected topics. Prerequisite: Advisor consent.

AGHR 5303 Research: 3 semester hours.
Conduct data collection, manuscript preparation, and presentation of research. Registration with permission of the graduate advisor/research chair. Student may enroll in this course twice for a total of 6 semester credit hours.

AGHR 5323 Workshop in Food and Agricultural Sciences: 3 semester hours.
Study of selected problems and issues in the food and agricultural sciences with emphasis on teacher and/or extension education programs. Analysis of contemporary educational needs. Selection and organization of course/program content, criteria and procedures for evaluation.

AGHR 5333 Administration and Supervision of Agriculture and Human Resources: 3 semester hours.
Development, organization, administration, and supervision of vocational agricultural education at the local, state, and national levels.

AGHR 5343 Youth Leadership Development: 3 semester hours.
Procedures of organizing and conducting agricultural programs and activities for developing leadership skills in youth.

AGHR 5353 Technological Change: 3 semester hours.
A study of advanced technological changes affecting the food and agricultural economy. Cultural and socioeconomic forces retarding and/or accelerating change. Processes of planning and implementing change.

AGHR 5373 Seminar: 3 semester hours.
Study of current legislative and research developments in the food and agricultural sciences. Readings, discussions and written reports focusing on application of developments in professional practice.
**AGHR 5813 Vocational Guidance and Counseling: 3 semester hours.**
Study of educational and occupational opportunities to assist youth in making career choices. Special attention is given to rural and limited resource youth. Techniques of individual and group counseling.

**AGHR 5823 Special Topics in the Food and Agricultural Sciences: 3 semester hours.**
Directed individual study of a problem affecting some aspect of the food and agricultural sciences. Special work in an identified area of special interest. Reports, discussion, and major paper required.

**AGHR 5833 Organization and Administration of Agricultural Extension Programs: 3 semester hours.**
Study of extension programming in agriculture and human sciences. Principles of developing objectives and program planning; coordination and procedures of teaching and evaluating. One week observation with a County Extension Agent required.

**AGHR 5991 Independent Study: 1 semester hour.**
Readings, research, and/or field placement focusing on pre-selected issues in the food and agricultural sciences.

**AGHR 5992 Independent Study: 2 semester hours.**
Readings, research, and/or field placement focusing on pre-selected issues in the food and agricultural sciences.

**AGHR 5993 Independent Study: 3 semester hours.**
Readings, research, and/or field placement focusing on pre-selected issues in the food and agricultural sciences.

**Agricultural Economics Courses**

**AGEC 1233 Fundamentals of Agricultural Economics: 3 semester hours.**
Survey of the nature, organization, and operation of the agricultural industry: application of economic principles to production and to the marketing of farm-ranch food and fiber products: and investigation of institutions and government as they affect agriculture.

**AGEC 2213 Marketing Agricultural Products: 3 semester hours.**
Study of movement of food and fiber products from the production area to the final consumer. Focus on intermediaries, including transportation agents. Efficiency of performing marketing activities under conditions for perfect and imperfect markets will be emphasized.
Prerequisites: AGEC 1233 and AGEC 2223 (may be taken concurrently).

**AGEC 2223 Food Distribution Systems: 3 semester hours.**
Study of the nature and functions of the various components of wholesale and retail food distribution. Facility locations, transportation, warehousing, quality control, inventory control, pricing, and other related topics.
Prerequisites: AGEC 1233 and AGEC 2213 (may be taken concurrently).

**AGEC 3203 World Food Seminar: 3 semester hours.**
Orientation and introduction to domestic and international food distribution employment opportunities. (Emphasis on providing a broader knowledge of careers in transportation, logistics, and distribution.)
Prerequisites: AGEC 2213 and AGEC 2223 and ECON 2113.

**AGEC 3213 Agricultural Policy: 3 semester hours.**
Study of the development of agricultural and food policies and evaluation of policies impact on producers and consumers in domestic and international markets.
Prerequisites: AGEC 2213 and AGEC 1213 and AGEC 3223 (may be taken concurrently).

**AGEC 3223 Agricultural Financial Analysis: 3 semester hours.**
Introduction to principles and concepts of finance. Financial statement analysis, risk and returns, time value of money, valuation concepts, capital budgeting, investments, and cost of capital.
Prerequisites: AGEC 2113 or ECON 2213 and MATH 1113 and AGEC 3213 (may be taken concurrently).

**AGEC 3233 Principles of Transportation: 3 semester hours.**
A course designed to develop basic competencies in the acquisition of transportation services for food and agricultural products. Emphasis will include: selection of transportation services, legal modes of transportation, shipping documents, rates, claims, and the changing environments for the transportation industry.
Prerequisites: AGEC 2213 or ECON 2113 and MATH 1113.

**AGEC 3253 International Trade and Logistics: 3 semester hours.**
Development of basic competencies in international marketing of food and agricultural products. Focus will be on major markets, international competition, and the impacts of US trade policies and exchange rates on trade.
Prerequisites: AGEC 1233 or ECON 2113 and MATH 1113.

**AGEC 3993 Independent Study: 3 semester hours.**
Reading, research and/or field work on selected topics.

**AGEC 4223 Principles of Agri-business Management: 3 semester hours.**
Economic and business principles applied to the organization and operation of farms and ranches, and other agri-business industries.
Prerequisites: AGEC 1233 or ECON 2113 and MATH 1113.
AGEC 4233 Land and Resource Economics: 3 semester hours.
Analysis of the economic, political, and institutional forces involved in the control and use of land and natural resources. Emphasis on land as a factor of production in agriculture.
Prerequisites: AGEC 1233 or ECON 2113 and MATH 1113.

AGEC 4253 Agricultural Prices: 3 semester hours.
Theories and principles fundamental to the pricing of agriculture commodities. Special emphasis will be placed on marketing conditions affecting price levels. Price and income parity, seasonal and cyclical price variations and futures trading. Prerequisites: AGEC 1233 or ECON 2113 and MATH 1113.

AGEC 4993 Independent Study: 3 semester hours.
Readings, research and/or field work on selected topics.

AGEC 5213 Land Use and Resource Management: 3 semester hours.
Nature and the economic dimensions of private and public control of land. Use of natural resources, including land, stock and flow resource concepts; time and space as they affect resource utilization and benefits. Laboratory studies of field problems in resource management and use.

AGEC 5223 Farm and Ranch Management: 3 semester hours.
Theories of the farm and of the management process; farm-ranch business growth and productive efficiency; control and coordination of the agents of production; risk and uncertainty; agribusiness organization and management; and managerial decision making. Laboratory application of principles of economics to the production process, including analysis of costs, returns, and productivity.

AGEC 5233 Price Analysis: 3 semester hours.
Theories and principles fundamental to pricing of agricultural factors of production and agricultural commodities; relationship of prices within the agricultural sector and between the agricultural sector and the general economy; kinds of price changes; forecasting factors and conditions that affect agricultural prices; futures trading; parity prices; and administrated prices.

AGEC 5243 Agricultural Policy: 3 semester hours.
Theoretical foundations of policy making and economic value of public policies and programs to the agricultural industry; interrelation between the social, political, and economic systems and agriculture; policy development and implementation; and the value of agricultural policy to society.

AGEC 5253 Marketing of Farm Products: 3 semester hours.
Theoretical foundations of the modern economic system, including values added in the marketing system; dimensions and functions of marketing in relation of time, space, and value; market integration and product quality control; and market contracting orders and power.

AGEC 5263 Research Methods in the Agricultural Sciences: 3 semester hours.
Philosophy, methods, and techniques of scientific inquiry in the discovery of new knowledge in the food, agricultural and human sciences; role of theory and assumptions. Defining and evaluating research project proposals, including objectives and procedures, analytical methods and techniques, evaluation of research studies, and development of thesis prospectus or equivalent.

AGEC 5283 Agricultural Finance: 3 semester hours.
Theories, principles, and problems of financing agricultural business, including farms and ranches; costs and returns from the use of capital; forms and roles of capital in agriculture; capital productivity and earning, and capital market organization, and institutions; supply and demand of financial resources; and role of debt in farm growth.

Agricultural Engineering Courses

AGEG 1413 Fundamentals of Agricultural Engineering: 3 semester hours.
Introduction to the major areas of agricultural engineering with emphasis on solving practical problems in agricultural production systems, grain systems, food systems, and hydrology. Course includes hands on work.

AGEG 2423 Agricultural Machinery: 3 semester hours.
Identification of agricultural machines and equipment; accessories, attachments, and components of agricultural tractors; inspections, adjustments, and maintenance services; and career opportunities.

AGEG 4423 Farm Drainage: 3 semester hours.
Land drainage: terracing, gully control, irrigation, and land reclamation.

Agronomy Courses

AGRO 1703 Crop Science: 3 semester hours.
Botanical characteristics of agronomic and horticultural plants; relationship between crops and civilization in both historical and biological terms; nature of crop plants in relation to structure, physiology, environment, growth and development; crop improvement, cropping systems and practices, crop hazards and prevention.

AGRO 2603 Environmental Soil Science: 3 semester hours.
An introduction to soils, its components and its relationship to the environment. The importance of soils to man, animals and plants. Important physical properties, role of soil constituents; origin, nature, and classification of parent materials; soil genesis, classification and survey; soil fertility and chemical properties; soils and chemical pollution; soils and the world's food supplements.
Prerequisites: AGRO 1703 (may be taken concurrently).
AGRO 2613 Natural Resource Conservation Management: 3 semester hours.
Ecological approach to basic conservation principles, concepts and techniques underlying the management and uses of natural resources that is both efficient and sustainable.
Prerequisites: AGRO 1703 and AGRO 2633 (may be taken concurrently).

AGRO 2623 Green House Mgmt: 3 semester hours.
The shape and source of soil features materials and processes involved in or produced after the formation of soil with emphasis on variations world-wide and the principles of soil classification, mapping, and interpretation. Additional topics include: soil taxonomy; land capability classification; soil survey and its utilization; and soil interpretations for non-farm uses.

AGRO 2633 Forage and Pasture Management: 3 semester hours.
Use of forage in grassland agriculture, identification of forage grasses and legumes, cultural practices including weed control, mechanization of forage harvesting and storage; types of pastures, different systems of grazing management and utilization of forages by farm animals.
Prerequisites: AGRO 1703 and AGRO 2613 (may be taken concurrently).

AGRO 2733 Principles of Crop Production: 3 semester hours.
Crop characteristics and classifications, growth patterns, soil and climate requirements (Physiology), pest control, storage, distribution, and application of these principles to the management and production of field and vegetable crops for improved food, fiber, and forages.
Prerequisites: AGRO 1703 and AGRO 2603 (may be taken concurrently).

AGRO 3623 Soil Morphology and Classification: 3 semester hours.
The shape and source of soil features materials and processes involved in or produced after the formation of soil with emphasis on variations world-wide and the principles of soil classification, mapping, and interpretation. Additional topics include: soil taxonomy; land capability classification; soil survey and its utilization; and soil interpretations for non-farm uses.
Prerequisites: AGRO 2603 and AGRO 3633 (may be taken concurrently) and AGRO 3713 (may be taken concurrently).

AGRO 3633 Soil Fertility and Fertilizers: 3 semester hours.
Chemical, biological and physical processes as they influence soil fertility, manufacture of fertilizers and their reactions with soils and the oil-plant-water system.
Prerequisites: AGRO 2603 and AGRO 3623 (may be taken concurrently) and AGRO 3713 (may be taken concurrently).

AGRO 3643 Soil and Water Management: 3 semester hours.
Sustainable soil productivity and management in agricultural systems involving resource inputs, tillage systems, erosion control, residue management, and water management for a quality environment.
Prerequisites: AGRO 2603 and AGRO 3733 (may be taken concurrently).

AGRO 3713 Gen Entomology: 3 semester hours.
Insect morphology, life histories, characteristics and habits of beneficial and harmful insects and their impact on agricultural production and the environment; anatomy and physiological growth and metamorphosis, insect orders, ecological aspects and insect behavior, control of harmful insects.
Prerequisites: AGRO 1703 and AGRO 3623 (may be taken concurrently) and AGRO 3633 (may be taken concurrently).

AGRO 3733 Plant Pathology: 3 semester hours.
Fundamental principles of plant pathology, including parasites and disease development, identification of major agronomic diseases and their biotic and abiotic causes; proper diagnosis of plant diseases, differentiation between signs and symptoms, isolation of pathogens in pure culture; environmental effects on development of infectious plant diseases; control of plant diseases.
Prerequisites: AGRO 1703 and AGRO 3643 (may be taken concurrently).

AGRO 3993 Independent Study: 1-3 semester hours.
Readings, research and/or field work on selected topics.

AGRO 4613 Soil Microbiology: 3 semester hours.
Role of soil microorganisms in soil-plant ecosystems. Microbial ecology, microbes in nutrient cycles important to agriculture, pesticide degradation, bacterial fertilizers, composting, waste disposal, plant microbe interactions. Laboratory estimation of soil microbial populations and measurement of important biological processes in soil and current methods.
Prerequisites: AGRO 3623 and AGRO 3633 and AGRO 3643.

AGRO 4623 Environmental Science: 3 semester hours.
Physical, chemical, biological and agricultural components of the environment and their interactions and effects on pollution and the maintenance and utilization of varied environmental systems.
Prerequisites: AGRO 3623 and AGRO 3633 and AGRO 3643.

AGRO 4993 Independent Study: 3 semester hours.
Readings, research and/or field work on selected topics.

AGRO 5613 Environmental Microbiology: 3 semester hours.
Study of the biological and chemical interactions between microbes and microbial metabolites with the environment (e.g. air, water, and soil) as related to food, agriculture quality and safety, animal and human health, and waste management. Emphasis will be on bioremediation, microbial bioprocesses, microbial by-products, microbial control and aerobiology. Laboratory, field and greenhouse situations will be practiced.
**AGRO 5653 Soil Chemistry: 3 semester hours.**
Study of the theories, principles, and practices of soils from a chemical process perspective. Soils and the application of nutrient cycling, plant nutrition, waste disposal, acid rain, pesticides and heavy metals. Soil, plant, and water interactions and analysis in laboratory settings required.

**AGRO 5663 Principles of Environmental Science and Management: 3 semester hours.**
Discussion, study and analysis of the methods of monitoring, assessing, and designing remedies for environmental pollution, including the physical, chemical and biological components utilized in maintaining and improving the capacity of varied environmental characteristics as related to agricultural production.

**AGRO 5723 Soil-Plant Relations: 3 semester hours.**
Discussion, study and analysis of the theories, principles, and practices which combine the production and management of plants for food, feed, and fiber with the determination of soil properties and their conservation and management. Review and analysis of recent literature pertaining to growth response curves, nutrient uptake, movement of nutrients in the soil, measurement of availability of nutrients to plants, and movement of nutrient to natural water systems.

**AGRO 5733 Agricultural Chemicals and Water Quality: 3 semester hours.**
Study and analysis of practices underlying the economical use of fertilizers, pesticides, and other agricultural chemicals. Emphasis on the relationship of soil properties and plant growth, selectivity and impact on the environment.

**AGRO 5743 Land Disposal of Wastes: 3 semester hours.**
Theoretical, regulatory, and practical aspects of disposal of municipal wastes, sewage effluent and sludge, industrial and hazardous wastes by land treatment and filling. Identification and assessment of strategies for clean-up of soil resources contaminated by past waste disposal as well as environmental impact of organic wastes.

**AGRO 5753 Soils, Ecology, and Land Uses: 3 semester hours.**
Soils and their properties as planned related to landscape ecology and specific land uses will be examined on a global, regional, and local level. An ecosystem approach will be used to examine issues and current problems associated with ecology and land use practices in agricultural systems, rangelands, forests, and wetlands. Also, ethical and philosophical points will be considered based on different soils, ecology, and land use viewpoints.

**AGRO 5793 Problems and Issues in Environmental Science: 3 semester hours.**
Identification and analysis of current trends and issues in environmental science. Evaluation of pending legislation, federal agency regulations and state and local policy applications. Reports; discussions; projects.

**Animal Science Courses**

**ANSC 1513 General Animal Science: 3 semester hours.**
Introductory course dealing with domestic farm animals common in the United States. Selection, reproduction, nutrition, management and marketing of beef cattle, swine, sheep, goats, and horses.

**ANSC 2513 Animal Production and Marketing: 3 semester hours.**
Systematic study of methods of breeding, feeding, marketing, sanitation and management of commercial animals (swine, beef and dairy cattle, horses, goats and sheep).
Prerequisites: ANSC 1513 and ANSC 2523 (may be taken concurrently) and ANSC 2533 (may be taken concurrently).

**ANSC 2523 Poultry Science: 3 semester hours.**
Knowledge of the history and development of the poultry industry; the anatomy and physiology of the domestic fowl, especially related to reproduction. Inferences of genetic, environmental and behavioral factors on embryonic development; effects of diet, drugs and toxins. Practices involve artificial incubation, breeding and rearing.
Prerequisites: ANSC 1513 and ANSC 2513 (may be taken concurrently) and ANSC 2533 (may be taken concurrently).

**ANSC 2533 Dairy Science: 3 semester hours.**
Branches of the dairy industry, introduction to dairy types and breeds, the major factors in the management of cattle for milk production, and the common dairy processes.
Prerequisites: ANSC 1513.

**ANSC 2543 Diseases and Sanitation: 3 semester hours.**
Clinical studies of the most common livestock diseases embracing anamnesis, etiology, symptoms, diagnosis, therapeutics, and prophylaxis.
Prerequisites: ANSC 1513 and ANSC 2513 (may be taken concurrently) and ANSC 2533 (may be taken concurrently) and ANSC 2553 (may be taken concurrently).

**ANSC 2552 Poultry Tech & Marketing: 2 semester hours.**
Factors affecting the physical, chemical, microbiological and functional characteristics of poultry and egg products. Product development, processing, quality packaging, and quality control concepts.
Prerequisites: ANSC 1513.

**ANSC 3503 Animal Nutrition: 3 semester hours.**
Composition and digestibility of feed, with physiology, preparation, feeding standards, calculation and balancing rations for commercial animal (swine, cattle-beef and dairy, sheep, goats, and horses).
Prerequisites: ANSC 1513.
ANSC 3514 Anatomy and Physiology: 4 semester hours.
Comparative approach, anatomically and physiologically of the basic systems of domestic animals.
Prerequisites: ANSC 1513.

ANSC 3523 Meat Science: 3 semester hours.
Methods of slaughtering farm animals, processing, curing preservation and storage of meats and products.
Prerequisites: ANSC 1513.

ANSC 3993 Independent Study: 3 semester hours.
Readings, research and/or field work on selected topics.

ANSC 3996 Independent Study: 1-6 semester hour.
Readings, research and/or field work on selected topics.

ANSC 4533 Breeding/Genetics: 3 semester hours.
Physiology of reproduction, breeding, breeding systems and practices. Application of genetic principles to the problems of animal breeding. Prerequisite: Junior standing.
Prerequisites: ANSC 1513 and ANSC 2513.

ANSC 4993 Independent Study: 3 semester hours.
Readings, research and/or field work on selected topics.

ANSC 4994 Independent Study: 1-4 semester hour.
Readings, Research and/or field work on selected topics.

ANSC 5513 Physiology of Reproduction: 3 semester hours.
Basic biochemical, physiological, and endocrine mechanisms involved in reproductive function. Current research principles and techniques useful in studying physiology of reproduction.

ANSC 5533 Non-Ruminant Nutrition: 3 semester hours.
Concepts of the function deficiency, interrelation and bio adaptability of nutrients as part of total feed formulation. The physical, chemical, and biological interrelationships of nutrients as they relate to growth, development, and production of mono-gastric animals.

ANSC 5543 Ruminant Nutrition: 3 semester hours.
Current concepts in anatomy, physiology, and microbiology of digestion of ruminants, with application of basic principles to efficient management of beef cattle, dairy cattle, goats and sheep.

ANSC 5553 Dairy Goat Production and Management: 3 semester hours.
Review of current research and production practices; the application of developing technology to goat enterprises, with economic evaluation of such enterprises.

ANSC 5563 Animal Health and Diseases: 3 semester hours.
Etiology, epidemiology, immunology, preventive measures, and management practices pertinent to diseases and health of animals.

ANSC 5573 Beef Cattle Production and Management: 3 semester hours.
Current research and production practices; the application of developing technology for beef cattle enterprises with economic evaluation of such enterprises.

Food Science Courses

FDSC 3583 Food Quality Assurance and Sanitation: 3 semester hours.
Examination of the elements of a comprehensive quality assurance program. Areas of study include sanitation, pest control, waste disposal, food law regulations, sensory testing, panel selection and training, and experimental design and analysis of data.

FDSC 3593 Food Bacteriology: 3 semester hours.
Microbiology of human foods and accessory substances. Raw and processed foods, physical, chemical and biological phases of spoilage. Standard industry techniques of inspection and control.

FDSC 4573 Food Processing and Engineering: 3 semester hours.
Study of the principles and practices of thermal processing, quick freezing, dehydration, fluid flows, heat transfer, pickling and juice manufacture.

Human Development Family Courses

HDFM 2513 Childhood Disorders: 3 semester hours.
This course is designed to introduce a general overview and treatment of major childhood disorders. It examines the history of childhood psychopathology, theories of development, medical and biological factors, mental retardation, drug and alcohol use, social and environment factors that relate to childhood problems.

HDFM 2533 The Contemporary Family in Cross-Cultural Perspective: 3 semester hours.
Analysis of family interaction patterns, roles, and functions, throughout the life cycle as influenced by customs, cultural diversity, and socioeconomic status with implications for broader understanding of a multicultural society. Examination of public policies and procedures impacting family functioning.
HDFM 2543 Pre-Adolescent and Adolescent Development: 3 semester hours.
Study and analysis of individual development from age twelve through twenty. Examination of developmental theories and current critical issues with emphasis on the role and relationships among family, peer, school and community interactions during these formative years. Observation, recording and evaluation of behaviors required.

HDFM 2553 Human Development: Life Span: 3 semester hours.
The dynamic processes of co-development of the individual from conception to senescence in physical, sensory, intellectual, emotional, and social development. Pattern of self-development with focus on the interaction between and among individuals.

HDFM 3503 Early Childhood Environments: 3 semester hours.
Study and analysis of varied environments for children. Guidelines for program planning, identification and selection of creative and expressive materials and equipment, staffing, organization and management, record keeping, licensing requirements, parent/child/teacher interactions, and effective guidance techniques. Observation, participation and assessment required.

HDFM 3513 Individual and Family Counseling Strategies: 3 semester hours.
Study, assessment and application of basic interviewing and counseling strategies to include varied interviewing models, techniques and methods which facilitate individual and family interactions.

HDFM 3523 Parenting Issues and Education: 3 semester hours.
Principles and patterns, philosophies and theories, methodologies and practices, and resources for the design, implementation, and evaluation of programs for enhancing parenting skills in the parent-child relationship.

HDFM 4513 The Family in Crisis: 3 semester hours.

HDFM 4543 Human Sex Lifespan: 3 semester hours.
Analysis and treatment of varied factors affecting sexual functioning among men and women with an emphasis on marital and family dynamics. Emphases also given male and female sexual dysfunctional behavioral and psychological dynamics.

Human Nutrition Food Courses

HUNF 1301 Introduction to Dietetics: 1 semester hour.
Students will be introduced to the profession of dietetics. The history of dietetics, career options, professional development (dietetics portfolio), the Academy code of ethics, standards of practice, the legislative process, and professional resources will be discussed.

HUNF 1343 Nutrition and Wellness: 3 semester hours.
Introduction to human nutrition and food. Study of human nutritional needs and problems encountered in providing food for the satisfaction of physiological and socio-cultural system needs, and the significance of these interrelationships to health. Discussion of current nutritional issues.

HUNF 2533 Intermediate Nutrition: 3 semester hours.
Study of the principles of nutrition and the application of these principles to providing adequate nutrition to humans. Introduction to the biochemical and physiological approach to nutrition will be emphasized.
Prerequisites: HUSC 1343.

HUNF 2633 Food Service Systems: 3 semester hours.
Study of the layout and design, equipment selection, and specifications of Food Service organizations, with emphasis on safety, sanitation, labor and financial control and consumer distribution.

HUNF 2653 Food Principles and Meal Management: 3 semester hours.
Principles of preparation, organization, and management applied to planning, preparation, serving, and marketing nutritious meals to individuals and groups at varied socioeconomic levels. Management of work areas, organization techniques, and standards for meal service and table appointments.
Prerequisites: HUSC 1343.

HUNF 2663 Food Systems Management: 3 semester hours.
Management principles, process and control strategies, roles and responsibilities in food service systems. Application of food preparation and management principles to quantity food production including menu planning, procurement, storage and distribution.

HUNF 3603 Nutritional Biochemistry: 3 semester hours.
A study of the biochemical basis of nutrition, the physiochemical properties of nutrients, and other essential biochemical and their roles in physiological and metabolic processes.
Prerequisites: HUNF 2533.

HUNF 3613 Nutrition Throughout the Lifecycle: 3 semester hours.
Comparative assessment evaluation of nutrition and dietary requirements throughout the lifecycle. Pre-pregnancy, pregnancy, lactation, infancy, childhood, adolescence, adulthood, and aging. Nutritional needs on the basis of both physical growth and psychological development are emphasized.
Prerequisites: HUSC 1343.
**HUNF 3623 Food Science and Technology: 3 semester hours.**

Principles and techniques of food processing and preservation and their effects on nutrient retention. Food and drug regulations, food additives and standards of identity.

Prerequisites: CHEM 2033 (may be taken concurrently) and CHEM 2032 and HUNF 2653.

**HUNF 3633 Advanced Nutrition: 3 semester hours.**

A review of the fundamentals of human nutrition. Course provides a comprehensive study of the structure and functions of carbohydrates, fats, proteins, vitamins and minerals in metabolism, and how these nutrients are used in the prevention of diseases.

Prerequisites: CHEM 4003 and HUNF 2533.

**HUNF 3643 Food and Culture: 3 semester hours.**

Food and Culture explores the connections between what we eat and who we are through a cross-cultural study of how personal and social identities are formed via food production, preparation, and consumption.

Prerequisites: HUNF 1313.

**HUNF 3653 Nutrition and Disease: 3 semester hours.**

Study of the physiological and metabolic anomalies in chronic and acute diseases, and principles of nutritional therapy and prevention. Computer assisted nutritional assessment and diet calculations.

Prerequisites: HUNF 2533.

**HUNF 3673 Nutritional Assessment: 3 semester hours.**

The course provides an in-depth to the purpose, concepts, methods, and scientific basis for assessment of nutritional status for individuals and groups. Students will have the opportunity to apply nutritional assessment principles and methods discussed in class in a supervised setting.

Prerequisites: HUNF 2533 and MATH 1113.

**HUNF 3993 Independent Study: 3 semester hours.**

Readings, research and/or field work on selected topics.

**HUNF 4303 Human Nutrition and Food Practicum: 3 semester hours.**

Planned observation and entry-level work experience in selected clinical, hospital, business, industrial, educational or governmental settings in Nutrition, Food Science, Foods, Dietetics or Nutrition Research. Required field experience includes a minimum of 200 clock hours of supervised work activities.

**HUNF 4413 Special Topics in Nutrition: 3 semester hours.**

Study of a problem affecting some aspect of human nutrition, food, or the food industry. Reports, discussion and major project are required. Repeatable for up to 6 semester credit hours.

Prerequisites: HUNF 3653 and HUNF 4663.

**HUNF 4473 Nutrition Counseling: 3 semester hours.**

This course is a directed study in theories, behavior change models, nutrition counseling, ADA Scope of Dietetics Practice Framework, the Standards of Professional Performance, the Code of Ethics of Dietetics, interdisciplinary relationships, and current issues in Human Nutrition.

Prerequisites: HUNF 3653 and HUNF 4663.

**HUNF 4603 Physiochemical Aspects of Food: 3 semester hours.**

This course covers physical and chemical factors accounting for color, flavor, and texture of natural and processed foods. Laboratory experiments to illustrate the effects of varying ingredients and treatment on the quality of food products. Objective and Sensory testing to determine food quality characteristics will be conducted.

Prerequisites: HUNF 3623.

**HUNF 4613 Research in Nutrition: 3 semester hours.**

Investigate special topics in nutrition. Research methodology and computer application including statistical analysis. Proposals prepared by students and presented to instructor for approval. Students work independently, seeking guidance as necessary.

Prerequisites: MATH 2003.

**HUNF 4663 Medical Nutrition Therapy I: 3 semester hours.**

Focus will be on Nutrition Care Process in Nutritional Screening Assessment, and Diagnosis of Metabolic, Cardiovascular and infectious disease states. Emphasis will be on medical terminology, clinical, anthropometric and nutritional data analysis, documentation, and provision of care.

Prerequisites: HUNF 3613 and HUNF 3653.

**HUNF 4673 Medical Nutrition Therapy II: 3 semester hours.**

Focus will be on Nutrition Care Process (NCP) in the treatment of metabolic, cardiovascular and infectious disease states.

Prerequisites: HUNF 4663.

**HUNF 4693 Community Nutrition and Health: 3 semester hours.**

Study of human nutrition and health problems from a community perspective; programs and policies related to nutrition at local, state and federal levels; approaches and techniques of effective application and dissemination of nutrition knowledge in communities.

Prerequisites: HUSC 1343 and HUNF 3613.

**HUNF 4993 Independent Study: 3 semester hours.**

Readings, research and/or field work on selected topics.
Human Science Courses

**HUSC 1303 Elementary Textiles: 3 semester hours.**
A study of fibers, yams, fabric structure, dyes and finishes of fabrics. Analysis of fiber finish developments; properties of textile use with emphasis on aesthetic quality, mechanical properties, factors of degradation, laundering and cleaning. Review of recent textile trends.

**HUSC 1313 Color and Design: 3 semester hours.**
Basic design principles applied to everyday living. Study of the relationship of sociological and anthropological principles to current perspectives in related art. Emphasis on art application and the use of computer simulation in the translation of theoretical concepts of space, pattern texture, line and color to the major disciplines in human sciences.

**HUSC 1333 Apparel Selection and Production: 3 semester hours.**
Application of elements and principles of color and design and of sociological and psychological concepts of behavior to contemporary apparel design and production. Analysis of the relationship of design to figure type, personality, color, and fabrication. O.

**HUSC 1343 Ecology of Human Nutrition and Food: 3 semester hours.**
Introduction to human nutrition and food. Study of human nutritional needs and problems encountered in providing food for the satisfaction of physiological and socio-cultural systems needs, and the significance of these interrelationships to health. Discussion of current nutritional issues.

**HUSC 1351 Human Sciences Perspectives: 1 semester hour.**
The history and development of home economics as family, consumer and human sciences. Preparation, competencies and enrichment in the broad spectrum of human science professions; career development and career alternatives; interaction techniques for development of satisfying interpersonal skills.

**HUSC 2313 Child Family & Comm: 3 semester hours.**
Influence of family, society, and cultural forces on behavior of children. Role of parents, teachers and professional workers in the healthy personality development of the child.

**HUSC 2373 Consumers and the Market: 3 semester hours.**
Analysis of consumer competencies, attitudes, and concepts of the present market, market practices, aids toward intelligent buying of commodities, and the types of protection including legislation.

**HUSC 3313 Program Planning I: 3 semester hours.**
A study of human sciences and related programs with emphasis on the development of skills in the planning, financing, managing, and marketing of these programs to varied audiences. Includes methods of observation and assessment of human science programs and services rendered to in-school and out-of-school youth and adults.

**HUSC 3323 Program Planning II: 3 semester hours.**
Analysis of the application of multiple strategies appropriate for delivering human science concepts to varied audiences utilizing multifaceted mediums. Includes examination and use of media, materials, supplies, equipment, and procedures for management, motivation and evaluation techniques.

**HUSC 3353 Housing and Human Environments: 3 semester hours.**
The physical, psychosocial, and aesthetic relationships between man and his environment with specific reference to housing. Economic, cultural and technological trends in building, equipment, living patterns and design. Comparative analysis of current housing trends and styles required.

**HUSC 3373 Child Development: 3 semester hours.**
Study and analysis of individual development and behavior during the early school years to adolescence with emphasis on physical, cognitive, social, language, and emotional areas. Examination of developmental and learning theories, principles of normal and atypical development and varied guidance techniques. Observation, recording and evaluation of behaviors required.

**HUSC 3993 Independent Study: 3 semester hours.**
Readings, research and/or field work on selected topics.

**HUSC 4304 Family Consumer Economics and Management: 4 semester hours.**
A systems approach to family resource management through theory analysis and exploration of varying family structure, styles, and conditions. Simulated laboratory in group living required. Laboratory fee required.

**HUSC 4306 Human Sciences Internship: 6 semester hours.**
Planned program of observation and entry-level work experience in selected business or industrial firms, educational or governmental agencies/organizations in the food, agricultural and/or human sciences.

**HUSC 4363 Family and Community Studies: 3 semester hours.**
Comprehensive study of the cultural, social, political, and technological influences that impact educational, business, and support service programs for individuals, families and groups in a changing society. Emphasis on philosophy, organization, planning, financing, implementation and assessment of the components of family and community service programs with special attention to the Cooperative Extension Service model. Review and evaluations of school and community based programs required.

**HUSC 4993 Independent Study: 3 semester hours.**
Readings, research, and/or field work on selected topics.
HUSC 5323 Marriage and Family Therapy Pre-Practicum: 3 semester hours.
Experimental application of varied therapeutic techniques, i.e. lecture, role play, small group and self-exploration as applied by the therapist in a variety of therapeutic settings.
Prerequisites: HUSC 5753.

HUSC 5326 Advanced Practice in Dietetics I: 6 semester hours.
Preplanned experience at the professional level in dietetic administration, food service management, clinical and therapeutic nutrition and community and public health nutrition.

HUSC 5333 Introduction to Clinical Hypnosis: 3 semester hours.
History, ethic, suggestions, induction, and deepening techniques utilizing hypnosis with client issues. Training in understanding, interpretation, and application of various hypnotic approaches. Suggestions utilized with major hypnotically indicated illness, disorders and varying client concerns.
Prerequisites: HUSC 5753.

HUSC 5336 Advanced Practice in Dietetics II: 6 semester hours.
Continuation of Advanced Practice in Dietetics I.

HUSC 5343 Research Problems: 3 semester hours.
Study of research methods, strategies and techniques application to the social and behavioral sciences with focus on individual and family studies and the role of research in professional and therapeutic services. Critical comparative analysis of the strengths and weaknesses of current research studies and the planning for needed research. Proposal writing required.

HUSC 5346 Marriage and Family Therapy Practicum II: 6 semester hours.
Supervises clinical practicum in marriage and family therapy. Therapeutic sessions with a variety of client issues and the utilization of major therapeutic techniques required. 200 clock hours of supervised field placement required.
Prerequisites: HUSC 5563.

HUSC 5353 Dietetic Seminar I: 3 semester hours.
Study of the delivery of nutritional services for individuals, families and institutions. Major emphasis on the current development in nutrition and dietetics. Reading, discussion and reports and presentations focusing on the professional practice of dietetics.

HUSC 5363 Dietetic Seminar II: 3 semester hours.
Continuation of Dietetic Seminar I. Study of current research and legislative events in nutrition and dietetics as they relate to the health and wellness of individuals and families.

HUSC 5373 Sex Therapy: 3 semester hours.
Analysis and treatment of varied factors affecting sexual functioning among men and women with an emphasis on marital and family dynamics. Emphasis also given to male and female dysfunctional behavior and psychological dynamics.

HUSC 5383 Child and Adolescent Therapy: 3 semester hours.

HUSC 5393 Family Communication: 3 semester hours.
An examination and application of various communication theories, patterns and techniques. Analysis of verbal and non-verbal communication patterns within the family are examined in family settings.

HUSC 5523 Marriage and Family Therapy: 3 semester hours.
Issues, practices and principles of marriage and family therapeutic strategies and techniques. Analysis of strategies and application of techniques in simulated situations required.

HUSC 5533 Family Theory and Issues: 3 semester hours.
A comprehensive review of theoretical-conceptual frameworks and research in family studies. Role of theory and research in the interdisciplinary study of individual and family behavior throughout the life cycle.

HUSC 5543 Theories of Child Development: 3 semester hours.
A study of the developmental characteristics of the child from birth to age 20. Analysis of major theories and research with emphasis on interpretation and application of research findings to programs for children and parenting education.

HUSC 5553 Human Development: 3 semester hours.
Study of multiple psycho biosocial characteristics of human development and behavior throughout the lifespan. Examination, evaluation and interpretation of developmental theories and current issues and trends.

HUSC 5563 Marriage and Family Therapy Practicum I: 3 semester hours.
Supervised clinical practicum in marriage and family therapy. Therapeutic sessions with a variety of client issues and the utilization of major therapeutic techniques required. 100 clock hours of supervised field placement required.
Prerequisites: HUSC 5393 and HUSC 5533 and HUSC 5543 and HUSC 5553.

HUSC 5573 Theories of Personality: 3 semester hours.
Review and study of major psychological personality theories and theoreticians of personality from a historical perspective. Principles, constructs, assumptions, and concepts that describe and predict individual behavior, affect and cognition.
HUSC 5583 Mental Health and Psychopathology: 3 semester hours.
Exploration of healthy personality and functional coping in personal/social context. Review and study of various models of psychopathology including
DSM and organic disease in the mental health setting. Roles and characteristics of the therapist in the supervision of trainees in varied clinical settings.

HUSC 5593 Clinical Supervision: 3 semester hours.
Study and application of marriage and family therapy supervisory functions as they relate to trainees under clinical supervision. The process of
supervision including roles, characteristics, and models are examined in varied clinical settings.

HUSC 5613 Victimization and Crisis Management: 3 semester hours.
This course explores forms of victimization and crisis management in a clinical setting, with an emphasis on demonstrating diagnostic competence,
treatment plan development, and effective and appropriate therapeutic techniques.

HUSC 5623 Counseling Diverse Populations: 3 semester hours.
An experiential course exploring areas of cultural diversity relevant to gender, ethnicity, sexual identity, and other diversities in a therapeutic practice,
with an emphasis on developing cultural competence, sensitivity and awareness to diversity. Other dimensions of diversity will be covered.

HUSC 5633 Clinical Assessment: 3 semester hours.
Course provides fundamental assessment principles focused on test and non-test appraisal instruments and development of diagnostic skills. Course
includes selection, execution and interpretation of instruments appropriate for individual, couple, and family appraisal. Clinical documentation skills are
developed.

HUSC 5683 Family Ethics and Issues: 3 semester hours.
Critical review of current literature on family ethics: principle problems of confidentiality, therapist and client relationships; special consideration given to
state and federal law.

HUSC 5693 Thesis: 3 semester hours.
Independent and original research leading to an acceptable master's thesis prospectus prepared under the direction of a faculty thesis committee and
must be orally defended and approved by all members of the faculty thesis committee before credit is recorded. The student must be registered for
Thesis until satisfactorily completed.
Prerequisites: HUSC 5393 and HUSC 5533 and HUSC 5543 and HUSC 5553.

HUSC 5713 Group Therapy: 3 semester hours.
Comprehensive study of methods, processes and strategies utilized in group therapy with individuals throughout the life span. Focus on the roles of
client and therapist within varied settings for practical application of group therapy approaches.

HUSC 5723 Family Financial Counseling: 3 semester hours.
Identification, review, and analysis of techniques and strategies to assist individuals and families of varied socioeconomic levels in financial decision
making and planning. Special attention to debt and risk management and retirement and estate planning. Survey and analysis of consumer financial
counseling services. Analysis of case and research studies and the written presentation of a research report and/or educational training manual
required.

HUSC 5733 Special Topics: 3 semester hours.
Directed individual study of issues affecting implementation of knowledge and skills in human sciences disciplinary specializations. Topical areas may
include, but are not limited to: individual and family development; housing studies; family/consumer resource management; family and community
studies; food and nutrition studies; adult development; clothing/apparel and textile studies; family and consumer sciences education; and individual
and family and other related therapeutic services. Victims and Victimization. An exploration into the dynamics of the victimization process and services
available for victims. Focusing on the expected results of experiencing traumas of nature and man, including the characteristics of victims and offenders
of criminal acts.

HUSC 5743 Addiction and Family Intervention: 3 semester hours.
Analysis of the psychodynamics of addictions as they relate to individual, family and community from a family systems perspective. Comparison of major
theories and treatment modalities as viewed from ethical, multicultural and legal perspectives.

HUSC 5753 Individual and Clinical Psychotherapy: 3 semester hours.
Study and utilization of major therapeutic models in the diagnosis and treatment of cognitive, emotional, moral, social, developmental and mental
disorders in the individual. Emphasis on diagnosis, prescriptive treatment, and referral of individuals from varied human and environmental systems.

HUSC 5763 Nutrition and Wellness: 3 semester hours.
Study of nutrition principles and practices that promote the general health and wellness of individuals in a multicultural society. Review of current
nutritional research studies and the written presentation of a research report required. Open to senior level students by permission.

HUSC 5993 Independent Study: 3 semester hours.
Readings, research, and/or field placement focusing on pre-selected issues.

HUSC 5996 Independent Study: 1-6 semester hour.
Readings, research, and/or field placement focusing on pre-selected issues.