ALEC 640: Methods of Technological Change

Catalog Pages referencing this course
ALEC - Ag Leadership, Ed. & Comm
Department of Agricultural Leadership, Education, and Communications

Programs referencing this course
CERT-CG63: Extension Education - Certificate

Faculty Senate Number: FS.35.102

Contact(s)

Date Submitted: 04/18/19 9:09 am

Viewing: ALEC 640: Methods of Technological Change
Last approved: 02/24/18 3:29 am
Last edit: 04/18/19 11:29 am
Changes proposed by: awinterrowd

In Workflow
1. ALEC Department Head
2. Curricular Services Review
3. AG Committee Preparer GR
4. AG Committee Chair GR
5. AG College Dean GR
6. GC Preparer
7. GC Chair
8. Faculty Senate Preparer
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services
13. Banner

Approval Path
1. 04/18/19 9:15 am
   Tracy Rutherford (rutherford): Approved for ALEC Department Head
2. 04/18/19 11:41 am
   Terra Bissett (t.bissett): Approved for Curricular Services Review
3. 04/18/19 4:45 pm
   Lauren Johnson (bkjohnson): Approved for AG Committee Preparer GR
4. 05/15/19 4:34 pm
   David W. Reed (dwreed): Approved for AG Committee Chair GR
5. 06/19/19 7:13 pm
   Mary Bryk (bryk): Approved for AG College Dean GR
6. 07/03/19 9:35 am
   LaRhesa Johnson (bkjohnson): Approved for GC Preparer GR
7. 07/25/19 9:36 am
   LaRhesa Johnson (bkjohnson): Approved for GC Chair

History
1. Feb 24, 2018 by Tracy Rutherford (rutherford)
Rationale for Course Edit
The proposed changes are part of a routine curriculum review.

Course prefix ALEC
Course number 640

Department Ag Leadership, Educ & Comm
College/School Agriculture & Life Sciences
Academic Level Graduate
Academic Level (alternate) Undergraduate

Effective term Summer 2019

Complete Course Title Methods of Technological Change
Abbreviated Course Title METH OF TECH CHANGE

Catalog course description Dynamics of cultural change as theoretical framework for planned technological change; methods of planning and implementing change, its effects and how it can be predicted.
Prerequisites and Restrictions Graduate classification.
Concurrent Enrollment No
Should catalog prerequisites / concurrent enrollment be enforced? No
Crosslistings No Crosslisted With
Stacked No Stacked with

Semester 3 Contact Hour(s) (per week): Lecture: 3 Lab: 0 Other: 0 Total
Credit Hour(s) 3
Repeatable for credit? No
Three-peat? No
CIP/Fund Code 1313010005
Default Grade Mode Letter Grade (G)
Alternate Grade Modes Satisfactory/Unsatisfactory
Method of instruction Lecture
Will this course be taught at another branch? No
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education) Yes

Learning Outcomes
Add a justification statement indicating the department/college faculty determined the learning outcomes are appropriate for the course.

This course meets learning outcomes through lectures and assignments.

Name E-mail Phone
Ashley Winterrowd awinterrowd@tamu.edu 9794580390
Add a justification statement indicating the department/college faculty determined the contact hours are appropriate for the course.

This course meets hours through lectures and assignments.

Will this course be taught as a distance education course? Yes  No

I verify that I have reviewed the FAQ for Export Control Basics for Distance Education. Yes

Is 100% of this course going to be taught in Texas? Yes

Will classroom space be needed for this course? Yes

This will be a required course or an elective course for the following programs:

<table>
<thead>
<tr>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(MAG-ADEV) Master of Agriculture in Agricultural Development</td>
</tr>
<tr>
<td>(MED-ALEC) Master of Education in Agricultural Leadership, Education, and Communication</td>
</tr>
<tr>
<td>(MS-ALEC) Master of Science in Agricultural Leadership, Education, and Communication</td>
</tr>
<tr>
<td>(PHD-ALEC) Doctor of Philosophy in Agricultural Leadership, Education, and Communication</td>
</tr>
</tbody>
</table>

Course Syllabus

Syllabus: Upload syllabus

Upload syllabus  ALEC 640 Online Syllabus.doc

Letters of support or other documentation  No  Yes

Additional information

Reviewer Comments  Terra Bissett (t.bissett) (04/18/19 11:30 am): A traditional and non-traditional syllabus may be required if the course is seeking non-traditional format approval.

Reported to state?  No
Texas A&M University
Department of Agricultural Leadership, Education, and Communications

SYLLABUS
Methods of Technological Change
ALEC 640 – Section 699, 700 (3 credit hours)
Course is delivered online.

Instructor: Dr. Theresa Murphrey
Email: t-muphrey@tamu.edu
Phone number: (979) 458-2749

Office location: AGLS 236
Office hours: By appointment.

Course Description and Prerequisites:
Dynamics of cultural change as theoretical framework for planned technological change; methods of planning and implementing change, its effects, and how it can be predicted. Prerequisite: Graduate classification.

Learning Outcomes:
1. Describe differences and relationships among cultural, social, and technological change.
2. Discuss the process by which technological innovations are adopted and diffused.
3. Analyze the dynamics of the change process from multiple models.
4. Discuss methods of planning and implementing change.
5. Predict consequences of planned change.
6. Develop strategies for managing conflict resulting from change.

Textbook and/or Other Required Resource Materials:


Course Calendar:

Each week, you are responsible for completing the following:
1. Unit lectures and support materials [listen/read online] (eCampus: Materials)
2. Unit activities [eCampus discussion board postings and online self-tests]
3. Textbook reading assignments
4. Unit quizzes [eCampus]
5. Submission of appropriate assignments (eCampus: Assignments)

Each week’s unit will become available in http://ecampus.tamu.edu/ by Monday evening*, and you will have until the following Monday at 11:00 pm CST to complete the unit, quizzes, and turn in assignments.*
<table>
<thead>
<tr>
<th>Week</th>
<th>Unit Topic</th>
<th>Due**</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Course Orientation &amp; Introduction</td>
<td></td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>2</td>
<td>Examining the Setting for Technological Change</td>
<td>Presentation Signup (Sept. 9th by 11:00 pm)</td>
<td>Est. 9 hours</td>
</tr>
<tr>
<td></td>
<td>Textbook Reading: Chapter 1***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Examining Relationships Among Different Types of Change</td>
<td>Live Online Presentations (Date to be determined)</td>
<td>Est. 11 hours</td>
</tr>
<tr>
<td>4</td>
<td>Examining Philosophy, Objectives, Learning, and their Relationships to the Adoption of Innovations</td>
<td></td>
<td>Est. 9 hours</td>
</tr>
<tr>
<td>5</td>
<td>Adopting Innovations</td>
<td>Live Online Presentations (Date to be determined)</td>
<td>Est. 11 hours</td>
</tr>
<tr>
<td></td>
<td>Textbook Reading: Chapters 4, 5, &amp; 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Understanding the Characteristics of People in Different Adopter Categories</td>
<td>Live Online Presentations (Date to be determined)</td>
<td>Est. 11 hours</td>
</tr>
<tr>
<td></td>
<td>Textbook Reading: Chapter 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Diffusing Innovations within a Social System</td>
<td>Article Reflection (Oct. 14th by 11:00 pm)</td>
<td>Est. 12 hours</td>
</tr>
<tr>
<td></td>
<td>Textbook Reading: Chapter 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Examining Ways in which Different Types of Power Structures Affect Change</td>
<td>Live Online Presentations (Date to be determined)</td>
<td>Est. 11 hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>9</td>
<td>Examining Phases of Planned Change</td>
<td></td>
<td>Est. 9 hours</td>
</tr>
<tr>
<td>10</td>
<td>Developing Program Strategies for Change Agents</td>
<td></td>
<td>Est. 9 hours</td>
</tr>
<tr>
<td></td>
<td>Textbook Reading: Chapter 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Factors Affecting the Process of Integrating Cross-Cultural Innovations</td>
<td></td>
<td>Est. 9 hours</td>
</tr>
<tr>
<td>12</td>
<td>Predicting the Consequences of Introducing Technological Change into Different Social Systems</td>
<td>Innovation Paper (Nov. 18th by 11:00 pm)</td>
<td>Est. 9 hours</td>
</tr>
<tr>
<td></td>
<td>Textbook Reading: Chapter 11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Analyzing the Role of the Change Agent in the Change Process</td>
<td></td>
<td>Est. 9 hours</td>
</tr>
<tr>
<td></td>
<td>Textbook Reading: Chapters 9 &amp; 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Applying Concepts in Context</td>
<td></td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>15</td>
<td>Preparing for the Final Examination</td>
<td>Final Exam</td>
<td>Est. 5 hours</td>
</tr>
</tbody>
</table>

*Course announcements will be posted each week on Monday by 11:00 pm to guide you through the course.

**Unit quizzes and discussion board participation are not listed. Remember to complete your unit quiz and participate in the discussion postings each week.

***All chapters refer to your text *Diffusion of innovations* by Everett M. Rogers.

This course has been assigned three credit hours based upon the work represented by verifiable student achievement of institutionally established learning outcomes, direct faculty instruction, and academically engaged time (Federal Rule 75 FR 66832; see [https://www.gpo.gov/fdsys/pkg/FR-2010-10-29/pdf/2010-26531.pdf](https://www.gpo.gov/fdsys/pkg/FR-2010-10-29/pdf/2010-26531.pdf)).
Other Course Information:

Class Participation (10%)
Everyone is expected to participate in discussion postings via the online classroom and the LIVE class meetings via an online system. **Discussion postings:** Throughout the course, I will ask you to post your thoughts to the class discussion board. Although I will not be “counting” the number of individual postings, I will review your posts throughout the class and will assess your participation on the quality of information shared with the class. I expect each student to post a minimum of one post per discussion topic. There will be times that you can contribute more or less than others. If you feel that you do not have anything to contribute to a particular topic, **you should contribute to the discussion by posting a question.** You may respond to either my initial posting or to your fellow student postings. Some discussion board postings are to encourage dialogue between and among fellow students—I encourage you to make use of this medium.

Unit Quizzes (10%)
Quizzes will reinforce learning and test your knowledge of the course content. You are allowed to take each quiz **two times,** and the highest grade will be recorded. I encourage you to review the material before taking the quiz. The quizzes are 10% of your course grade. **Each unit quiz will cover your Online Unit Material and Textbook Readings. Each quiz must be completed in “Assessments” by at the end of each week’s unit—Monday by 11:00 P.M.**

Article Summary/Reflection (15%) – Technological Change in Research
Select a research article that addresses one of the topics (i.e., Adoption of innovations; Opinion leadership; Role of change agent; Change process; Introducing change into a cross-cultural setting; Power structures; Consequences of introducing innovations) in relation to the diffusion of innovations and technological change. Write a summary and reflection of the article. Your submission should include the following: a) a summary of the main points, b) an explanation of why you selected the article, c) your reaction to the article, and d) identification of which of the topics listed above is addressed by the article. **Be sure to include a complete reference for the article at the top of your assignment following APA style. Provide a copy of the article or a link to the article.**

Presentation & Written Summary (20%) – “Expanding Beyond the Classroom”
The purpose of student summaries and presentations is to encourage a connection between the class material presented throughout the semester and the world around you. Our class presentations will be used to encourage a connection between current media/events and our class topics. Your presentation should be able to be connected to units within the course. At the beginning of the presentation you should identify how you see the content connected to the course and which units are reflected in the content. There are four different dates that you can sign up on. There are a limited number of spaces for each day. You will turn in your PowerPoint presentation and written summary prior to your actual presentation. Presentations will be delivered using a LIVE Online Classroom. If you are unable to attend the LIVE sessions, you will be required to listen/view a recorded session of the presentations and submit a 1-page summary of the topics shared in the presentations.
Innovation Paper (20%)
Identify an innovation that relates to your area of interest and write a 4- to 5-page double spaced paper identifying the innovation, describing the characteristics of the innovation, discussing the possible consequences of the innovation and the strategy that you would use to encourage or discourage the adoption of the innovation. You may use “Pointers on Preparing Working Strategies” (640-0-2d) as a guide in preparing your paper. -- In preparing this project for ALEC 640, keep in mind that it is to be the development of a working strategy for introducing and securing the adoption of an innovation by the people with whom you work as a change agent. Identify an innovation that relates to something that interests you.

Final Examination (25%)
The final exam will be provided 1 week prior to the scheduled date for the exam. The Final Exam will be an open-book test that includes knowledge and application questions.

Grading Policies:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class Participation (Discussion board postings, online meetings, etc.)</td>
<td>10% (10 points)</td>
</tr>
<tr>
<td>Unit Quizzes</td>
<td>10% (10 points)</td>
</tr>
<tr>
<td>Article Summary/Reflection</td>
<td>15% (15 points)</td>
</tr>
<tr>
<td>Presentation &amp; Written Summary</td>
<td>20% (20 points)</td>
</tr>
<tr>
<td>Innovation Paper</td>
<td>20% (20 points)</td>
</tr>
<tr>
<td>Final Examination</td>
<td>25% (25 points)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100% (100 points)</strong></td>
</tr>
</tbody>
</table>

Final course grades will be assigned as follows, based on the weighted number of points earned as a percentage of total points possible:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
<td>90-100%</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
<td>80-89%</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
<td>70-79%</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
<td>60-69%</td>
</tr>
<tr>
<td>F</td>
<td>Less than 60</td>
<td>Below 60%</td>
</tr>
</tbody>
</table>

Other Information:

Students are expected to participate in the course throughout the semester. Assignments may be submitted early. Students are encouraged to contact the instructor directly regarding submission of late work.

APA is the standard style for our profession. All assignments, including reflection, should be in APA format. For details on APA style, consult the APA manual.

Attendance Policies:

This course is an online course and thus attendance is not regulated based upon seat time but rather completion of required activities. Points are assigned for participation rather than attendance. Participation involves completion of assignments/assessments, attendance at LIVE sessions, and submission of discussion board postings.
Make-up Policy:

The course deadlines are clearly stated in this document – be sure to print this to help you stay on track. The only deadline to be determined is the presentation deadline. You will sign up for a date to present during the first few weeks of class. Late work will follow university rules.

See Student Rule 7 for details (http://student-rules.tamu.edu/rule07). University-excused absences do not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.

Americans with Disabilities Act (ADA) Policy Statement:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit http://disability.tamu.edu.

Academic Integrity Statement and Policy:

Aggie Honor Code

“An Aggie does not lie, cheat, or steal or tolerate those who do.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Ignorance of the rules does not exclude any member of the Texas A&M University community from the requirements or the processes of the Honor System. For additional information, please visit http://aggiehonor.tamu.edu/. On course work, assignments, and examinations at Texas A&M University, you may be asked to sign the following Honor Pledge: “On my honor, as an Aggie, I have neither given nor received unauthorized aid on this academic work.”

Copyright and Plagiarism Notice:

The handouts used in this course are copyrighted. By “handouts,” I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, in-class materials, review sheets, and additional items. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly grant permission. As commonly defined, plagiarism consists of passing off as one’s own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section “Scholastic Dishonesty.”
MEMORANDUM

TO: Mr. Michael K. Young, President

THROUGH: Dr. Carol A. Fierke, Provost and Executive Vice President

FROM: Dr. Michael Benedik, Vice Provost

SUBJECT: December 11, 2017 Faculty Senate Items

All of the attached December 2017 Faculty Senate items have been reviewed and approved by college, university curriculum, Faculty Senate and Office of the Provost.

New Course Request, Course Change Request, Course Withdrawal Request, Course Inactivation and Change in Curriculum Request, Informational Review Items

Approval recommended. FS.35.101, FS.35.102; FS.35.103; FS.35.104; FS.35.111; FS.35.112; FS.35.113; FS.35.114; FS.35.115; FS.35.116; FS.35.117; FS.35.118; FS.35.119; FS.35.120; FS.35.121; FS.35.122; FS.35.123; FS.35.124; FS.35.125; FS.35.126; FS.25.127; FS.35.128; FS.35.129; FS.35.130; FS.35.131; FS.35.132; FS.35.133; FS.35.134; FS.35.135; FS.35.136; FS.35.137; FS.35.138; FS.35.139; FS.35.140; FS.35.141; FS.35.142; FS.35.143; FS.35.144; FS.35.145; FS.35.146; FS.147; FS.35.148; FS.35.149; FS.35.150; FS.35.151; FS.35.152.

FS.35.105: Recommend approval. School of Public Health, Department of Health Policy and Management, MHA-HADM: Master of Health Administration in Health Administration. Request to change SCHs from 57 SCH to 55 SCH. The change will strengthen the resident track curriculum and ensure consistency between the Resident track and Executive track for Commission on Accreditation of Healthcare Management Education accreditation. Externa1 Action: Request to Change Semester Credit Hours form will be submitted to the System for approval by the THECB.

FS.35.106: Recommend approval. College of Agriculture and Life Sciences, Department of Nutrition and Food Science, MS-FSTC: Master of Science in Food Science and Technology. The non-thesis MS Food Science & Technology option is being discontinued in favor of the MAQR Food Science & Technology. The MS Food Science & Technology with thesis will remain. No external action.

FS.35.108: Recommend approval. School of Public Health, Department of Health Promotion and Community Health Sciences, CERT-CG58: Global Health-Certificate. Certificate requires 15 SCH, which does not surpass Texas Administrative Code, Chapter 5, Subchapter C, Section 5.48 allowed SCH. No external action.


FS.35.110: Recommend approval. Graduate Courses Taught in Non-traditional Formats-Spring 2018- 2nd Request. Graduate Courses Taught in Non-traditional Formats-Spring 2018. All colleges within Texas A&M performed a comparison of the learning outcomes for distance education and non-traditional courses for equivalency to traditional face-to-face courses to determine if the courses met compliance to University Rule 11.03.99.M1. No external action required.

Attachments
ECEN 687: Introduction to VLSI Physical Design Automation

Catalog Pages referencing this course

Contact(s)

Date Submitted: 05/10/19 5:37 pm
Last edit: 06/13/19 9:50 am
Changes proposed by: w-lala

In Workflow
1. ECEN Department Head
2. Curricular Services Review
3. EN Committee Preparer GR
4. EN Committee Chair GR
5. EN College Dean GR
6. GC Preparer
7. GC Chair
8. Faculty Senate Preparer
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services
13. Banner

Approval Path
1. 04/26/19 3:00 pm
   Miroslav Begovic (begovic): Approved for ECEN Department Head
2. 04/29/19 8:31 am
   Terra Bissett (t.bissett): Rollback to Initiator
3. 05/13/19 3:09 pm
   Crystal Rodriguez (cbrodriguez): Approved for ECEN Department Head
4. 05/13/19 4:11 pm
   Terra Bissett (t.bissett): Approved for Curricular Services Review
5. 06/13/19 4:46 pm
   Jennifer Veracruz (jveracruz): Approved for EN Committee Preparer GR
6. 06/20/19 10:33 am
   Harry Hogan (h-hogan): Approved for EN Committee Chair GR
7. 06/20/19 10:35 am
   Harry Hogan (h-hogan): Approved for EN College Dean GR
8. 07/03/19 9:38 am
   LaRhesa Johnson (lrjohnson): Approved for GC Preparer
9. 07/29/19 9:49 am
   LaRhesa Johnson (lrjohnson): Approved
<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windy Lala</td>
<td><a href="mailto:w-lala@tamu.edu">w-lala@tamu.edu</a></td>
<td>979-458-3127</td>
</tr>
</tbody>
</table>

Rationale for Course Edit

The proposed changes are part of a routine curriculum review.

Course prefix: ECEN  
Course number: 687

Department: Electrical & Computer Eng
College/School: College of Engineering
Academic Level: Graduate
Effective term: Summer 2019
Complete Course Title: Introduction to VLSI Physical Design Automation
Abbreviated Course Title: INTRO VLSI DESN AUTO

Catalog course description:
Algorithms and techniques for VLSI design automation, including basic optimization techniques, high level synthesis, logic synthesis/verification, physical design, timing verification and optimization.

Prerequisites and Restrictions:
ECEN 248.

Should catalog prerequisites / concurrent enrollment be enforced?
Yes

Enforced Prerequisites / Concurrent Enrollment

<table>
<thead>
<tr>
<th>And/Or</th>
<th>Course Prefix/Number</th>
<th>Min Grade/Score</th>
<th>Academic Level</th>
<th>Concurrency?</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>ECEN 248</td>
<td>D</td>
<td>UG</td>
<td>No</td>
</tr>
</tbody>
</table>

Crosslistings:
No

Stacked:
No

Semester Credit:
3 Contact Hour(s) (per week):
Lecture: 3 Lab: 0 Other: 0 Total
Repeatable for credit?
No

CIP/Fund Code: 1410010006

Default Grade Mode: Letter Grade (G)

Method of instruction: Lecture

Will this course be taught at another branch?
No

Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)
Yes

Learning Outcomes

Add a justification statement indicating the department/college faculty determined the learning outcomes are appropriate for the course.

Learning outcomes are met in the same manner as the traditional, on-campus sections.
Hours

Add a justification statement indicating the department/college faculty determined the contact hours are appropriate for the course.

Course is scheduled to meet the same lecture requirements as a traditional, face-to-face section through alternative methods.

Will this course be taught as a distance education course?  
Yes  No

I verify that I have reviewed the FAQ for Export Control Basics for Distance Education.

Yes  No

Is 100% of this course going to be taught in Texas?  
Yes

Will classroom space be needed for this course?  
Yes

This will be a required course or an elective course for the following programs:

Required (select program)

Elective (select program)

<table>
<thead>
<tr>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(MEN-CEEN) Master of Engineering in Computer Engineering</td>
</tr>
<tr>
<td>(MEN-ELEN) Master of Engineering in Electrical Engineering</td>
</tr>
<tr>
<td>(MS-CEEN) Master of Science in Computer Engineering</td>
</tr>
<tr>
<td>(MS-ELEN) Master of Science in Electrical Engineering</td>
</tr>
<tr>
<td>(PHD-CEEN) Doctor of Philosophy in Computer Engineering</td>
</tr>
<tr>
<td>(PHD-ELEN) Doctor of Philosophy in Electrical Engineering</td>
</tr>
</tbody>
</table>

Course Syllabus

Syllabus: Upload syllabus

Upload syllabus  syllabus_ECEN687_2019.pdf

Letters of support or other documentation  No

Additional information  Non-Traditional Format Request

Reviewer Comments

Terra Bissett (t.bissett) (04/29/19 8:31 am): Rollback: if requesting non-traditional format approval, please attach a traditional syllabus and a non-traditional syllabus (if applicable).

Terra Bissett (t.bissett) (05/13/19 4:10 pm): Syllabus received; a traditional and non-traditional syllabus may be required if the course is seeking non-traditional format approval.
SYLLABUS

Course title and number: ECEN 687: Introduction to VLSI Design Automation
Term (e.g., Fall 200X): Fall 2019
Meeting times and location: MWF 12:40-1:30p.m., 1035 ETB

Course Description and Prerequisites

The course provides a comprehensive introduction to algorithms and techniques for VLSI design automation, including basic optimization techniques, high level synthesis, logic synthesis/verification, physical design, timing verification and optimization.

Prerequisite: None.

Learning Outcomes or Course Objectives

At the end of this course, students should understand basic algorithmic techniques for automated VLSI design and verification at circuit and system level.

Instructor Information

Name: Jiang Hu
Telephone number: 979-847-8768
Email address: jianghu@tamu.edu
Office hours: Tuesday 10-11 a.m., Thursday 2-3 p.m.
Office location: 333L WEB

Textbook and/or Resource Material

None

Grading Policies

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm 1</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm 2</td>
<td>25%</td>
</tr>
<tr>
<td>Midterm 3</td>
<td>25%</td>
</tr>
<tr>
<td>TOTAL POINTS</td>
<td>100%</td>
</tr>
</tbody>
</table>

Grading Scale

*Standard Letter Grading Scale:
A = 85-100
B = 70-84
C = 60-69
### Course Topics, Calendar of Activities, Major Assignment Dates

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Required Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Linear programming</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Nonlinear programming and graph</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Combinatorial optimization</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>High level model and transforms</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Task scheduling and binding</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Logic synthesis and decision diagrams</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Functional verification</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Automatic test pattern generation</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Partitioning and floorplanning</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Cell placement</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Routing and clock network synthesis</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Gate and interconnect models</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Parasitic extraction and timing analysis</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Timing optimization</td>
<td></td>
</tr>
</tbody>
</table>

### Other Pertinent Course Information

None.

### Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit [http://disability.tamu.edu](http://disability.tamu.edu).

### Academic Integrity

*For additional information please visit: [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu)*

“An Aggie does not lie, cheat, or steal, or tolerate those who do.”
Course Change Request

Date Submitted: 03/19/19 1:51 pm

Viewing: **GENE 603 : Genetics**

Last edit: 03/19/19 1:51 pm

Changes proposed by: carolvargasb

Catalog Pages referencing this course

- ANSC - Animal Science
- Department of Animal Science
- Department of Poultry Science
- Department of Soil and Crop Sciences
- Department of Veterinary Integrative Biosciences
- EEBL - Ecology and Evolutionary Biology
- GENE - Genetics
- M&P - Biological Sciences
- M&PB - Biological Sciences

Contact(s)

In Workflow

1. BCBP Reviewer GR
2. BCBP Department Head
3. Curricular Services Review
4. AG Committee Preparer GR
5. AG Committee Chair GR
6. AG College Dean GR
7. GC Preparer
8. GC Chair
9. Faculty Senate Preparer
10. Faculty Senate
11. Provost II
12. President
13. Curricular Services
14. Banner

Approval Path

1. 04/18/18 2:41 pm
   Mary Bryk (bryk): Approved for BCBP Reviewer GR
2. 05/15/18 3:26 pm
   Gregory Reinhart (g-reinhart): Approved for BCBP Department Head
3. 05/16/18 2:18 pm
   Terra Bissett (l.bissett): Approved for Curricular Services Review
4. 05/22/18 1:04 pm
   Dawn Kerstetter (dkerstetter): Approved for AG Committee Preparer GR
5. 06/20/18 2:29 pm
   Dawn Kerstetter (dkerstetter): Rollback to BCBP Reviewer GR
   for AG Committee Chair GR
6. 07/03/18 10:47 am
   Mary Bryk (bryk): Approved for BCBP Reviewer GR
7. 07/09/18 5:08 pm
   David Peterson (depetersen): Rollback to BCBP Reviewer GR
   for BCBP Department Head
8. 07/09/18 10:05 pm
Mary Bryk (bryk):
Rollback to Initiator
9. 07/15/18 11:42 am
Mary Bryk (bryk):
Approved for BCBP Reviewer GR
10. 10/19/18 3:23 pm
Dorothy Shippen (dshippen):
Approved for BCBP Department Head
11. 10/19/18 5:41 pm
Terra Bissett (t.bissett):
Approved for Curricular Services Review
12. 10/22/18 8:32 am
Dawn Kerstetter (dkerstetter):
Approved for AG Committee Preparer GR
13. 11/14/18 2:45 pm
Dawn Kerstetter (dkerstetter):
Rollback to Initiator
14. 03/13/19 12:11 pm
Mary Bryk (bryk):
Rollback to Initiator
15. 03/17/19 9:25 pm
Mary Bryk (bryk):
Approved for BCBP Reviewer GR
16. 03/17/19 9:25 pm
Mary Bryk (bryk):
Approved for BCBP Department Head
17. 08/19/19 1:22 pm
Terra Bissett (t.bissett):
Rollback to Initiator
18. 08/19/19 4:12 pm
Mary Bryk (bryk):
Approved for BCBP Reviewer GR
19. 08/19/19 4:12 pm
Mary Bryk (bryk):
Approved for BCBP Department Head
20. 08/20/19 8:56 am
Terra Bissett (t.bissett):
Approved for Curricular Services Review
21. 03/20/19 12:40 pm
Dawn Kerstetter (dkerstetter):
Approved for AG Committee Preparer GR
22. 05/15/19 4:34 pm
David W. Reed (dreed):
Approved for AG Committee Chair GR
23. 06/17/19 10:04 am
Mary Bryk (bryk):
Approved for AG College Dean GR
## Rationale for Course Edit

The proposed changes are to meet the demand/interest of students.

<table>
<thead>
<tr>
<th>Course prefix</th>
<th>Course number</th>
<th>Delta</th>
<th>Department</th>
<th>Biochemistry &amp; Biophysics</th>
</tr>
</thead>
<tbody>
<tr>
<td>College/School</td>
<td>Agriculture &amp; Life Sciences</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Academic Level</td>
<td>Graduate</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Effective term</td>
<td>Fall 2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete Course Title</td>
<td>Genetics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abbreviated Course Title</td>
<td>GENETICS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Catalog course description

Development of fundamental concepts related to the structure, function, organization, transmission and distribution of genetic material.

### Prerequisites and Restrictions

GENE 301.

### Should catalog prerequisites / concurrent enrollment be enforced?

No

### Crosslistings

No

### Crosslisted With

No

### Stacked

No

### Stacked with

No

### Semester 3 4

<table>
<thead>
<tr>
<th>Contact Hour(s) (per week):</th>
<th>Lecture: 3 4</th>
<th>Lab: 0</th>
<th>Other: 0</th>
<th>Total</th>
</tr>
</thead>
</table>

### Credit Hour(s)

3 4

### Repeatable for credit?

No

### CIP/Fund Code

2608040002

### Default Grade Mode

Letter Grade (G)

### Method of instruction

Lecture

### Will this course be taught at another branch?

No

### Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)

Yes

### Learning Outcomes

Add a justification statement indicating the department/college faculty determined the learning outcomes are appropriate for the course.

**Students will follow a similar syllabus as the traditional format**
Hours

Add a justification statement indicating the department/college faculty determined the contact hours are appropriate for the course.

**Students will be spending similar amount of hours as in the traditional format**

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will this course be taught as a distance education course?</td>
<td>Yes</td>
</tr>
<tr>
<td>I verify that I have reviewed the FAQ for Export Control Basics for Distance Education.</td>
<td>Yes</td>
</tr>
<tr>
<td>Is 100% of this course going to be taught in Texas?</td>
<td>Yes</td>
</tr>
<tr>
<td>Will classroom space be needed for this course?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

This will be a required course or an elective course for the following programs:

<table>
<thead>
<tr>
<th>Required (select program)</th>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(PHD-GENE) Doctor of Philosophy in Genetics</td>
<td>(PHD-GENE) Doctor of Philosophy in Genetics</td>
</tr>
</tbody>
</table>

Elective (select program)

---

**Course Syllabus**

**Syllabus:** 
Upload syllabus

Upload syllabus
- GENE603 syllabus.pdf
- GENE603- online (700).pdf

Letters of support or other documentation 
No

Additional information

Attached are the syllabi for the traditional (face to face) and non traditional section of this course.

Reviewer Comments

Mary Bryk (bryk) (04/06/18 5:24 pm): What changes are being made? A syllabus is needed.

Mary Bryk (bryk) (04/06/18 5:25 pm): Rollback: Dear Carol, The changes being made are not clear with the information provided. Will you please describe the changes being made and upload the new syllabus?

Dawn Kerstetter (dkerstetter) (06/20/18 2:29 pm): Rollback: Need to check YES for "Will this course be taught as a distance education course?"; Syllabus needs total hour clarification in course calendar.

Mary Bryk (bryk) (07/09/18 4:04 pm): need to rollback; must indicate this will be taught as a distance education course.

David Peterson (dopeterson) (07/09/18 5:08 pm): Rollback: Changes are needed according to Dr. Bryk.

Mary Bryk (bryk) (07/09/18 10:05 pm): Rollback: Must change form to indicate that the -700 section will be taught as a distance education course. I believe that the COALS GPC requested hours on both syllabi. I see the hrs on the -700 syllabus but they are requested on the 600 section syllabus, as well.

Dawn Kerstetter (dkerstetter) (11/14/18 2:45 pm): Rollback: TABLED per Dr. Loren Skow. GPC states syllabi Learning Outcomes are insufficient. Per university definition must be “observable and measurable”. GPC recommends detailed Learning Outcomes (and titled as such). See UCC/GC Course Submission Checklist for more information.

Carol Vargas-Bautista (carolvargash) (03/13/19 11:27 am): Dear all, The Executive Committee of the Genetics Program would like to change the number of credits of the GENE 603 course from 4 CR to 3 CR. This course is taught in Fall to the first year GENE students in our PhD program. The committee has reconsidered the amount of effort the students put into it should be less and would like to make the change. Also, we have been trying to create a non-traditional section. Hopefully, we filled out the form appropriately for that goal this time. Syllabi
have been attached.

Mary Bryk (bryk) [03/13/19 12:11 pm]: Rollback: The syllabus for online course should show the number of hours for each activity on the lecture/activity schedule. The learning outcomes have not been updated, as requested previously (November).

Terra Bissett (t.bissett) [03/19/19 1:22 pm]: Rollback: If course hours are changing, please update traditional syllabus; traditional syllabus is missing website link to Student Rule 7.

Carol Vargas-Bautista (carolvargasb) [03/19/19 1:52 pm]: Sorry for the typo. Credit hours in traditional syllabus have been changed to 3. Website link to student rule 7 has been added.

Terra Bissett (t.bissett) [03/20/19 8:56 am]: Updates received.
Course title and number     Genetics, GENE 603
Term                      Fall 2019
Meeting times and location Online only

Course Focus

This course provides a practical introduction to Genetics. We will take considerable advantage of resources available on the internet, including sites such as the (NCBI) https://www.ncbi.nim.nih.gov. A home page for this course is available at: http://people.tamu.edu/~c-magill/gene603/. It has outlines of each lecture and copies of all exams I have given since 1999. They make good study guides as far as showing you that the questions are not based on rote memorization, but will require ability to use course information to solve problems. As a distance student, you will have access to Powerpoint versions of each lecture, with audio files attached to help explain the concepts covered. These will be available to you via the eCampus portal http://ecampus.tamu.edu. I will arrange for a group discussion board for those interested.

Course Description and Prerequisites

GENE 603 (3 Credit hours) Genetics is a course which provides the foundation of the basic concepts related to the structure, function, organization, transmission and distribution of genetic material. This course requires Gene 301 or equivalent.

Learning Outcomes

Successful completion of this course will prepare you for advanced courses in all areas of genetics and genomics as well as plant and animal breeding. At the end of the course, the student will:

- Demonstrate understanding of cutting-edge research approaches in transmission genetics;
- Describe, critically evaluate, and apply current theoretical perspectives in genetics; and
- Demonstrate proficiency in analytical and statistical procedures appropriate for genetic analyses

Instructor Information

Professor       Dr. Clint Magill
Phone            979 845 8250
Email            c-magill@tamu.edu
Office hours     By appointment
Office location  Department of Plant Pathology and Microbiology
                 Office: 202H, L. F. Peterson

Textbook and/or Resource Material

If you already own a recent Genetics text, it should be fine. If not, I recommend either of two that generally follow the same order as class; "Genetics, The Continuity of Life" by Fairbanks and Andersen and "iGenetics, a Molecular Approach" by Russsell. The Fairbanks and Anderson text is somewhat dated but has many especially good end-of-chapter problems that are based on actual experimental data. The 9th edition (2019) of Genetics by Hartl and Cochrane appears to be excellent and up to date, but I haven't used it before.
Grading Policies

Your grade will be determined by your performance on 3 midterm exams, and a comprehensive final, all weighted equally. The midterm exams are scheduled on Friday but can be done on the weekend. You should allow at least 4 hours for each exam, especially if this is your first semester with exams in English. Homework assignments will provide opportunities for sufficient bonus points to make up at least one unsatisfactory exam. The homework problems and point values will be posted on the class WEB site and announced in class and via e-mail. If your final score (exam average plus homework points) is more than 1 standard deviation above the class exam average you are guaranteed an A and if within 1 standard deviation, you cannot make less than B.

Standard Letter Grading Scale:
A = 90-100
B = 80-90
C = 70-79
D = 60-69
F = <60

Points Grading Scale:
Out of 400 assignable points
A = 360-400 points
B = 320-359 points
C = 280-319 points
D = 240-279 points
F = <240 points

Note: A grade of "Incomplete" will only be used as delineated in Student Rule 10.5.

Attendance and Make-up Policies

The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. University rules related to excused absences are located on-line at http://student-rules.tamu.edu/rule07. Because this is an online course where students have some flexibility in when to view course materials, no make-up work is allowed. However, if the student feels they have an unusual situation that merits an opportunity for make-up work, they should contact the instructor. Such cases will be considered on an individual case-by-case basis.
### Course Topics, Calendar of Activities, Major Assignment Dates

(The schedule below, especially for the dates and value of homework assignments is tentative.)

<table>
<thead>
<tr>
<th>Week/Dates</th>
<th>Topics</th>
<th>Chapters</th>
<th>Workload Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td>DNA Structure and Replication; Eu- and Prokaryotes; Transcription, &amp; Processing</td>
<td>Ch 2 Ch 2 &amp; 3 Ch 3 Ch 5</td>
<td>9</td>
</tr>
<tr>
<td><strong>Week 2</strong></td>
<td>Translation, Genetic Code; Protein function</td>
<td>Ch 4 Ch 6</td>
<td>9</td>
</tr>
<tr>
<td>Homework #1</td>
<td></td>
<td>OMIM alleles search</td>
<td></td>
</tr>
<tr>
<td><strong>Week 3</strong></td>
<td>Mutation; Mutagens and Repair Systems</td>
<td>Ch 5 Ch 19</td>
<td>9</td>
</tr>
<tr>
<td><strong>Week 4</strong></td>
<td>Pathways; Gene Function, Bacterial Genetics</td>
<td>Ch 6 Ch 4</td>
<td>9</td>
</tr>
<tr>
<td><strong>Week 5</strong></td>
<td>Pro and Eukaryotic Regulation, RNAi</td>
<td>Ch 7 &amp; 8 Ch 16 &amp; 17</td>
<td>9</td>
</tr>
<tr>
<td>Exam #1</td>
<td>TBA</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 6</strong></td>
<td>Recombinant DNA Technology</td>
<td>Ch 9 Ch 7-9 BLAST</td>
<td>9</td>
</tr>
<tr>
<td>Homework #3</td>
<td>12 points. Due before week 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 7</strong></td>
<td>Chromosomes; Meiosis and Mitosis, Mendel</td>
<td>Ch 10-12 Ch 1 &amp; 10</td>
<td>9</td>
</tr>
<tr>
<td>Homework #4</td>
<td>4 points. Due before week 8</td>
<td>PCR primer design</td>
<td></td>
</tr>
<tr>
<td><strong>Week 8</strong></td>
<td>Interactions, Sex-related, Imprinting, Mapping Gene Fine Structure,</td>
<td>Ch 13-15 Ch 11 &amp; 12</td>
<td>9</td>
</tr>
<tr>
<td><strong>Week 9</strong></td>
<td>Chromosome # Aberrations</td>
<td>Ch. 16 &amp; 17 Ch 13 &amp; 14</td>
<td>9</td>
</tr>
<tr>
<td>Exam #2</td>
<td>TBA</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 10</strong></td>
<td>Structural aberrations, Cytoplasmic Inh. 8 points.</td>
<td>Ch 18 Ch 21 &amp; 15</td>
<td>9</td>
</tr>
<tr>
<td>Homework #5</td>
<td>Due before week 11</td>
<td>Inversion problem</td>
<td></td>
</tr>
<tr>
<td><strong>Week 11</strong></td>
<td>Population Genetics &amp; Evolution</td>
<td>Ch19 &amp; 21 Ch 22 &amp; 24</td>
<td>9</td>
</tr>
<tr>
<td>Homework #6</td>
<td>8 points. Due before week 12</td>
<td>ABO equilibrium</td>
<td></td>
</tr>
<tr>
<td><strong>Week 12</strong></td>
<td>Quantitative Inheritance, Heritability 8 points.</td>
<td>Ch 20 Ch 23</td>
<td>9</td>
</tr>
<tr>
<td>Homework #7</td>
<td>Due before week 13</td>
<td>QTL mapping or X2</td>
<td></td>
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<tr>
<td><strong>Week 13</strong></td>
<td>Transposons</td>
<td>Ch 22 &amp; 23 Ch 20</td>
<td>9</td>
</tr>
<tr>
<td>Reading Day</td>
<td>Thanksgiving break</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 14</strong></td>
<td>Developmental Genetics &amp; Immunogenetics</td>
<td>Ch 25 Ch 17</td>
<td>9</td>
</tr>
<tr>
<td>Exam #3</td>
<td>TBA</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Week 15</strong></td>
<td>CRISPRS &amp; Hot topics</td>
<td>Ch 26 &amp; 27 NA (2 hour time limit)</td>
<td>9</td>
</tr>
<tr>
<td>Final Exam</td>
<td>The final will emphasize ‘take home lessons’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Workload Hours: 135
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“An Aggie does not lie, cheat, or steal, or tolerate those who do.”
Course title and number: Genetics, GENE 603
Term: Fall 2019
Meeting times and location: MWF 9:10 AM-10:00, BICH 106A

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Phone: 979 845 8250
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  - F = <240 points

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Attendance is required unless there is a genuine emergency as described in Student Rule 7 (http://student-rules.tamu.edu/rule07). Missing class without a documented emergency will result in a zero score for the assignment. Attendance and make-up policy will follow Student Rule 7. I do expect you to come to class; it helps me to tell whether or not the points I am trying to make are getting across. However, if you must miss a class Powerpoint slides with audio files on e-campus will allow you to catch up. Makeup exams will be offered for any University defined excused absence, or with my approval, if requested ahead of time. As graduate students, I understand that you may have meetings to attend or experiments that are time sensitive. See excused absences for the events approved by the University. (http://student-rules.tamu.edu/rule07).
### Course Topics, Calendar of Activities, Major Assignment Dates

(The schedule below, especially for the dates and value of homework assignments is tentative.)

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<thead>
<tr>
<th>Week/Dates</th>
<th>Topics</th>
<th>Fairbanks----Russell</th>
<th>Workload Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>DNA Structure and Replication; Eu- and Prokaryotes; Transcription, &amp; Processing</td>
<td>Ch 2 Ch 2 &amp; 3 Ch 3 Ch 5</td>
<td>9</td>
</tr>
<tr>
<td>Week 2</td>
<td>Translation, Genetic Code; Protein function</td>
<td>Ch 4 Ch 6</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Homework #1</td>
<td>4 points. Due before week 3</td>
<td>OMIM alleles search</td>
</tr>
<tr>
<td>Week 3</td>
<td>Mutation; Mutagens and Repair Systems</td>
<td>Ch 5 Ch 19</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Homework #2</td>
<td>5 points. Due before week 4</td>
<td>RNA editing/C-AREs</td>
</tr>
<tr>
<td>Week 4</td>
<td>Pathways; Gene Function, Bacterial Genetics</td>
<td>Ch 6 Ch 4</td>
<td>9</td>
</tr>
<tr>
<td>Week 5</td>
<td>Pro and Eukaryotic Regulation, RNAi</td>
<td>Ch 7 &amp; 8 Ch 16 &amp; 17</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Exam #1</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Week 6</td>
<td>Recombinant DNA Technology</td>
<td>Ch 9 Ch 7-9</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Homework #3</td>
<td>12 points. Due before week 7</td>
<td>BLAST</td>
</tr>
<tr>
<td>Week 7</td>
<td>Chromosomes; Meiosis and Mitosis, Mendel</td>
<td>Ch 10-12 Ch 1 &amp; 10</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Homework #4</td>
<td>4 points. Due before week 8</td>
<td>PCR primer design</td>
</tr>
<tr>
<td>Week 8</td>
<td>Interactions, Sex-related, Imprinting, Mapping Gene Fine Structure,</td>
<td>Ch 13-15 Ch 11&amp; 12</td>
<td>9</td>
</tr>
<tr>
<td>Week 9</td>
<td>Chromosome # Aberrations</td>
<td>Ch. 16 &amp;17 Ch 13 &amp;14</td>
<td>9</td>
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<td></td>
<td>Exam #2</td>
<td>TBA</td>
<td></td>
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<tr>
<td>Week 10</td>
<td>Structural aberrations, Cytoplasmic Inh. 8 points.</td>
<td>Ch 18 Ch 21 &amp; 15</td>
<td>9</td>
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<tr>
<td></td>
<td>Homework #5</td>
<td>Due before week 11</td>
<td>Inversion problem</td>
</tr>
<tr>
<td>Week 11</td>
<td>Population Genetics &amp; Evolution</td>
<td>Ch19 &amp; 21 Ch 22 &amp; 24</td>
<td>9</td>
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<tr>
<td></td>
<td>Homework #6</td>
<td>8 points. Due before week 12</td>
<td>ABO equilibrium</td>
</tr>
<tr>
<td>Week 12</td>
<td>Quantitative Inheritance, Heritability 8 points.</td>
<td>Ch 20 Ch 23</td>
<td>9</td>
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<tr>
<td></td>
<td>Homework #7</td>
<td>Due before week 13</td>
<td>QTL mapping or X2</td>
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<tr>
<td>Week 13</td>
<td>Transposons</td>
<td>Ch 22 &amp; 23 Ch 20</td>
<td>9</td>
</tr>
<tr>
<td>Reading Day</td>
<td>Thanksgiving break</td>
<td></td>
<td></td>
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<tr>
<td>Week 14</td>
<td>Developmental Genetics &amp; Immunogenetics</td>
<td>Ch 25 Ch 17</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Exam #3</td>
<td>TBA</td>
<td></td>
</tr>
<tr>
<td>Week 15</td>
<td>CRISPRS &amp; Hot topics</td>
<td>Ch 26 &amp; 27 NA</td>
<td>9</td>
</tr>
<tr>
<td>Final Exam</td>
<td>The final will emphasize ‘take home lessons’</td>
<td>(2 hour time limit)</td>
<td></td>
</tr>
</tbody>
</table>

Total Workload Hours: 135
Americans with Disabilities Act (ADA)

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information visit http://disability.tamu.edu

Academic Integrity

For additional information please visit: http://aggiehonor.tamu.edu

“An Aggie does not lie, cheat, or steal, or tolerate those who do.”
Course Change Request

Date Submitted: 03/20/19 11:27 am

Viewing: **POSC 609 : Avian Physiology**

Last edit: 03/28/19 1:40 pm

Changes proposed by: mfarrell

<table>
<thead>
<tr>
<th>In Workflow</th>
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<tbody>
<tr>
<td>1. POSC Reviewer GR</td>
</tr>
<tr>
<td>2. POSC Department Head</td>
</tr>
<tr>
<td>3. Curricular Services Review</td>
</tr>
<tr>
<td>4. AG Committee Preparer GR</td>
</tr>
<tr>
<td>5. AG Committee Chair GR</td>
</tr>
<tr>
<td>6. AG College Dean GR</td>
</tr>
<tr>
<td>7. GC Preparer</td>
</tr>
<tr>
<td>8. GC Chair</td>
</tr>
<tr>
<td>9. Faculty Senate Preparer</td>
</tr>
<tr>
<td>10. Faculty Senate</td>
</tr>
<tr>
<td>11. Provost II</td>
</tr>
<tr>
<td>12. President</td>
</tr>
<tr>
<td>13. Curricular Services</td>
</tr>
<tr>
<td>14. Banner</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approval Path</th>
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</thead>
<tbody>
<tr>
<td>1. 08/20/18 4:27 pm</td>
</tr>
<tr>
<td>Morgan Farnell (mfarrell): Approved for POSC Reviewer GR</td>
</tr>
<tr>
<td>2. 08/20/18 5:05 pm</td>
</tr>
<tr>
<td>David Caldwell (caldwell): Approved for POSC Department Head</td>
</tr>
<tr>
<td>3. 08/22/18 5:00 pm</td>
</tr>
<tr>
<td>Terra Bissett (t.bissett): Approved for Curricular Services Review</td>
</tr>
<tr>
<td>4. 08/23/18 1:23 pm</td>
</tr>
<tr>
<td>Dawn Kerstetter (dkerstetter): Rollback to Initiator</td>
</tr>
<tr>
<td>5. 09/26/18 3:27 pm</td>
</tr>
<tr>
<td>Morgan Farnell (mfarrell): Approved for POSC Reviewer GR</td>
</tr>
<tr>
<td>6. 10/16/18 9:43 am</td>
</tr>
<tr>
<td>David Caldwell (caldwell): Approved for POSC Department Head</td>
</tr>
<tr>
<td>7. 10/16/18 2:55 pm</td>
</tr>
<tr>
<td>Terra Bissett (t.bissett): Approved for Curricular Services Review</td>
</tr>
<tr>
<td>8. 10/16/18 3:40 pm</td>
</tr>
<tr>
<td>Dawn Kerstetter (dkerstetter): Approved for AG Committee Preparer GR</td>
</tr>
<tr>
<td>9. 10/17/18 3:54 pm</td>
</tr>
</tbody>
</table>

Contact(s)
The proposed changes are to meet the demand/interest of students.

- Required for approval of courses that will be offered as non-traditional (distance education/web-based).

- Course hours changed from 4 to 3, removed laboratory component

Name | E-mail | Phone
--- | --- | ----
Morgan Farnell | mfarnell@tamu.edu | 979-847-7363

Rationale for Course Edit | Other
--- | ---
The proposed changes are to meet the demand/interest of students.

Explain other rationale

- Required for approval of courses that will be offered as non-traditional (distance education/web-based).

Course prefix | Course number
--- | ---
POSC | 609

Department | Poultry Science
College/School | Agriculture & Life Sciences
Academic Level | Graduate
Effective term: Fall 2020
Complete Course Title: Avian Physiology
Abbreviated Course Title: AVIAN PHYSIOLOGY

Catalog course description:
Basic physiological principles pertaining specifically to avian species; cardiovascular, neural, respiratory, digestive, endocrine and reproductive systems; physiological experiments use various avian species as laboratory animals.

Prerequisites and Restrictions:
Approval of instructor.

Should catalog prerequisites / concurrent enrollment be enforced?
No

Crosslistings:
No

Stacked:
No

Semester Credit Hour(s):
3

Contact Hour(s) (per week):
Lecture: 3
Lab: 0
Other: 0
Total: 3

Repeatable for credit?
No

CIP/Fund Code:
2607070002

Default Grade Mode:
Letter Grade (G)

Method of instruction:
Lecture and Laboratory
Lecture

Will this course be taught at another branch?
No

Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)
Yes

Learning Outcomes:
Add a justification statement indicating the department/college faculty determined the learning outcomes are appropriate for the course.

The learning outcomes on the syllabus used for the face to face version of the distance courses were compared with the distance section syllabus. Both the face to face and distance courses had the same learning outcomes. Learning outcomes for the non-traditional courses were equivalent to the traditional course.

Hours:
Add a justification statement indicating the department/college faculty determined the contact hours are appropriate for the course.

Course instructors use the same content for the face to face courses for the non-traditional courses.

Will this course be taught as a distance education course?
Yes

I verify that I have reviewed the FAQ for Export Control Basics for Distance Education.
Yes

Is 100% of this course going to be taught in Texas?
Yes
Will classroom space be needed for this course? Yes

This will be a required course or an elective course for the following programs:

Required (select program)

Elective (select program)

---

**Course Syllabus**

<table>
<thead>
<tr>
<th>Syllabus:</th>
<th>Upload syllabus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>POSC 609 DE Syllabus Fall 2019 Farnell Final.pdf</td>
</tr>
<tr>
<td></td>
<td>POSC 609 Syllabus Fall 2019 Farnell Final.pdf</td>
</tr>
</tbody>
</table>

Letters of support or other documentation No

Additional information

Reviewer Comments

Sandra Williams (sandra-williams) (03/21/18 7:58 pm): Rollback: You need to attach a traditional syllabus and a non-traditional syllabus (if applicable).

Morgan Farnell (mfarnell) (08/20/18 4:26 pm): I see 3 hours listed for lab, but there isn't a lab associated with the graduate class. Should we correct this?

Dawn Kerstetter (dkerstetter) (08/23/18 1:23 pm): Rollback: • Need student rule link added to attendance policies • Need to add "Activities" to Lecture Schedule in syllabus (see ESSM 652 syllabus for example) • Syllabus should include 3 hour lab

Dawn Kerstetter (dkerstetter) (10/17/18 3:54 pm): Course tabled by GPC, syllabus needs updating, multiple changes needed for course submission

Terra Bissett (t.bissett) (03/11/19 8:28 am): A traditional and non-traditional syllabus may be required if the course is seeking non-traditional format approval.

Terra Bissett (t.bissett) (03/11/19 8:30 am): Rollback: Syllabus: missing link to Student Rule 7 (http://student-rules.tamu.edu/rule07); please update link to Aggie Honor Code (http://aggiehonor.tamu.edu)

Terra Bissett (t.bissett) (03/21/19 8:43 am): Updates received.
COURSE INFORMATION

Distance course

Three credits

INSTRUCTOR INFORMATION:

Instructor: Dr. Yuhua Farnell
Office: 352A Kleberg
Phone: 979-847-7346
E-mail: yfarnell@tamu.edu
Office hours: TR 11:10 to 12:10 pm or by appointment (email to set up)

COURSE DESCRIPTION AND PREREQUISITES

Course Description: Basic physiological principles pertaining specifically to avian species; cardiovascular, neural, respiratory, digestive, endocrine and reproductive systems; physiological experiments use various avian species as laboratory animals.

Prerequisites: Approval of instructor

Textbook and Resource Materials:
   No Textbook.
   Online Chapters from Sturkie’s Avian Physiology will be posted on eCampus.
   Research papers will be assigned.

LEARNING OUTCOMES:

1. Compare and contrast the major physiological systems of the bird that support homeostasis.
2. Differentiate among prominent anatomical features of the bird, including external, internal, reproductive, and musculoskeletal anatomical systems.
3. Practice formal writings in special topics in avian physiology.

TENTATIVE LECTURE SCHEDULE
<table>
<thead>
<tr>
<th>Lecture Day/Date</th>
<th>Topics</th>
<th>Activities</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 27</td>
<td>Course Introduction and Overview</td>
<td>Orientation activities&lt;br&gt;Introduce our format for lab activities and requirement for formal writing rubric</td>
<td>Est. 3 hours</td>
</tr>
<tr>
<td>Aug. 29</td>
<td>Multi-omics approaches to health and disease</td>
<td>Application of Genomic, Transcriptomic, Proteomic, and Metabonomic methods in avian science</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Sept. 3</td>
<td>Basic biochemistry</td>
<td>Carbohydrate, lipid and protein metabolism</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Sept. 5</td>
<td>Skeleton / Physiology of Bone</td>
<td>Read Chapter 15 from Sturkie Avian physiology: Poultry bone development and bone disorder; Factors that regulate osteogenesis; Avian specific characteristics of bone; Tibial dyschondroplasia</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Sept. 9</td>
<td>Physiology of Skeletal Muscle</td>
<td>Read Chapter 16 from Sturkie Avian physiology: Skeletal muscle; What are the mechanisms for post-natal skeletal muscle development? Function of satellite cells; Wooden breast and cause</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Sept. 10</td>
<td>Physiology of Skeletal Muscle</td>
<td>Read Chapter 16 from Sturkie Avian physiology: Skeletal muscle; What are the mechanisms for post-natal skeletal muscle development? Function of satellite cells; Wooden breast and cause</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Sept. 12</td>
<td>Physiology of Smooth Muscle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept. 17</td>
<td>Blood and the Immune System</td>
<td>Read Chapter 10 and 17 from Sturkie Avian physiology: Blood and Avian immune system; Molecular mechanism of innate immune response; Primary and secondary lymphoid tissues</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Sept. 19</td>
<td>Exam 1</td>
<td></td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Sept. 24</td>
<td>Physiology of the Nervous System</td>
<td>Read part II-Sensory biology and nervous system. Compare CNS to PNS; Differences between somatic and autonomic nerves; The reflex arc; action potentials; somatic motor nerves and autonomic motor nerves; differences in sympathetic and parasympathetic division/ Avian circadian system</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Sept. 26</td>
<td>Physiology of the Nervous System Cont.</td>
<td></td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 1</td>
<td>Flight</td>
<td>Necessary components for flight; Metabolic rate during flight; The function of different organs during the flight; Migration</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 3</td>
<td>Respiratory Physiology</td>
<td>Read Chapter 13 from Sturkie Avian physiology: Respiration; Compare the differences of anatomy of respiratory system between birds and human; Respiratory muscles and bones during inspiration and expiration in birds</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 8</td>
<td>Respiratory Physiology Cont.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oct. 10</td>
<td>GI Physiology</td>
<td>Read Chapter 14 from Sturkie: GI anatomy and physiology; Gastrointestinal cycle; Effects of neural and hormone on nutrient digestion and motility; Enzymes secreted by GI in avians; Regulation of food intake</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 15</td>
<td>GI Physiology Cont.</td>
<td></td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Oct. 17</td>
<td>Interaction of gut and microbiome</td>
<td>Read Chapter 21 from Sturkie: Regulation of food intake&lt;br&gt;Gut health and microbiomes (read recent publications posted on eCampus)</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Oct. 22</td>
<td>Renal Physiology</td>
<td>Read Chapter 12 from Sturkie Avian physiology: Osmoregulatory systems of birds; Glomerular filtration rate of special birds; Nitrogen excretion</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Oct. 24</td>
<td>Renal Physiology</td>
<td></td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 29</td>
<td>Thermoregulation</td>
<td>Thermogenesis and thermolysis; Heat production and thermoregulation; Thermal neutral zones; Heat stress</td>
<td>Est. 5 hours</td>
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<tr>
<td>Oct. 31</td>
<td>Exam 2</td>
<td></td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Nov. 5</td>
<td>Sensory Organs</td>
<td>Read Chapter 6, 7 and 8 from Sturkie Avian physiology: Sensory biology, avian hearing, chemical senses, and magnetoreception in birds and its use in long-distance migration</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 7</td>
<td>Endocrinology</td>
<td>Read Chapter 17 and 41 from Sturkie: Endocrine pancreas, and actions of toxicants and endocrine-disrupting chemicals in birds; Stress and animal behavior</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 12</td>
<td>Endocrinology Cont.</td>
<td></td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 14</td>
<td>Reproductive Physiology-Female</td>
<td>Read Chapter 25 and 28 from Sturkie: reproduction in the female and the role of hormones on hens</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 19</td>
<td>Reproductive Physiology-Male</td>
<td>Read Chapter 29 from Sturkie Avian physiology: Reproduction in male birds; Hormone effects of testicular function; Spermatogenesis</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 21</td>
<td>Student Oral presentation</td>
<td>Online students can upload their files to eCampus</td>
<td>Est. 5 hours</td>
</tr>
</tbody>
</table>
Nov. 26  | Student Oral Presentation | Online students can upload their files to eCampus | Est. 5 hours
---|---|---|---
Nov. 28 | **No class.** | **Thanksgiving break** |  
Dec. 3  | Redfine day. No class |  
Dec. 5  | Reading day. No class |  
Dec. 10 | Final Exam |  
Total Hours |  
| | | **152 hours**

### Determination of Course Grade:

<table>
<thead>
<tr>
<th>Points:</th>
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<tbody>
<tr>
<td>Major Lecture Exam 1</td>
</tr>
<tr>
<td>Major Lecture Exam 2</td>
</tr>
<tr>
<td>Five (20 point) lecture quizzes</td>
</tr>
<tr>
<td>*Final Lecture Exam</td>
</tr>
<tr>
<td>Research Paper (Special topic)</td>
</tr>
<tr>
<td>Oral Presentation (Special topic)</td>
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### Point Total / Grade Distribution:

<table>
<thead>
<tr>
<th>Grade:</th>
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<tbody>
<tr>
<td>540-600 (90-100%)</td>
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<tr>
<td>480-539 (80-89%)</td>
</tr>
<tr>
<td>420-479 (70-79%)</td>
</tr>
<tr>
<td>360-419 (60-69%)</td>
</tr>
<tr>
<td>Less than 360</td>
</tr>
</tbody>
</table>

### Absenteeism Policy

This policy is drafted in accordance with the Texas A&M University Regulations Manual. Absences from exams and quizzes will be excused for reasons including the following:

1. Participation in an activity appearing on the University authorized list.
2. Death or major illness in a student's immediate family.
3. Participation in legal or administrative procedures that require a student's presence.
4. Illness of a dependent family member.
5. Religious holy day.
6. Confinement because of illness.
7. Required participation in military duties.

The student must notify the instructor of the excused absence, in person or by telephone, within 48 hours of the last date of absence. Makeup exams will be scheduled and must be completed within 30 days of the last date of absence. Unexcused absences on dates of quizzes or exams will result in grades of F (0 points) on that exam.
In addition to these University mandated regulations; the following policies also apply to absenteeism in this course:

1. A log of attendance will be kept by the instructor for all class and lab meetings.
2. Students will acknowledge attendance by signing (not printing) a daily attendance log.
3. **Unexcused absences on days of exams and quizzes will result in final grades of zero (0) on missed exams or quizzes.**
4. All makeup exams due to excused absences will have an oral question component in addition to the written portion of the exam per the discretion of the instructor.

Students who are requesting an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code; See Student Rule 7 of the Texas A&M University Student Rules: [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07).

**Academic Integrity**

**Aggie Honor Code:**

For many years, Aggies have followed a Code of Honor, which is stated in this very simple verse: **“An Aggie does not lie, cheat, or steal or tolerate those who do.”** The Aggie Code of Honor is an effort to unify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. It only calls for honesty and integrity, characteristics that Aggies have always exemplified. The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other. Following each quiz or examination in this course, you will attest to your adherence to this code by signing your name by the following statement:

**“On my honor as an Aggie, I have neither given nor received unauthorized aid on this academic work.”**

Student signature: _____________________
Date: _____________________

**Plagiarism and Copyrighted Materials**

The handouts used in this course are copyrighted. By "handouts," I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly
grant permission. As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. Anyone suspected of plagiarism will be given an oral exam on the material in question. Anyone committing plagiarism will receive a grade of "F" in this course. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty." Refer to the Honor Council Rules and Procedures at http://aggiehonor.tamu.edu

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COURSE INFORMATION

Lecture Meeting Time: Tuesday & Thursday 9:30 - 11:00 am
Room 400 KLCT

Three credits

INSTRUCTOR INFORMATION:

Instructor: Dr. Yuhua Farnell
Office: 352A Kleberg
Phone: 979-847-7346
E-mail: yfarnell@tamu.edu
Office hours: TR 11:10 to 12:10 pm or by appointment (email to set up)

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Course Description: Basic physiological principles pertaining specifically to avian species; cardiovascular, neural, respiratory, digestive, endocrine and reproductive systems; physiological experiments use various avian species as laboratory animals.

Prerequisites: Approval of instructor

Textbook and Resource Materials:
No Textbook.
Online Chapters from Sturkie's Avian Physiology will be posted on eCampus.
Research papers will be assigned.

LEARNING OUTCOMES:

1. Compare and contrast the major physiological systems of the bird that support homeostasis.
2. Differentiate among prominent anatomical features of the bird, including external, internal, reproductive, and musculoskeletal anatomical systems.
3. Practice formal writings in special topics in avian physiology.

TENTATIVE LECTURE SCHEDULE
<table>
<thead>
<tr>
<th>Lecture Day/Date</th>
<th>Topics</th>
<th>Activities</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug. 27</td>
<td>Course Introduction and Overview</td>
<td>Orientation activities; Introduce our format for lab activities and requirement for formal writing rubric</td>
<td>Est. 3 hours</td>
</tr>
<tr>
<td>Aug. 29</td>
<td>Multi-omics approaches to health and disease</td>
<td>Application of Genomic, Transcriptomic, Proteomic, and Metabolomic methods in avian science</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Sept. 3</td>
<td>Basic biochemistry</td>
<td>Carbohydrate, lipid and protein metabolism</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Sept. 5</td>
<td>Skeleton / Physiology of Bone</td>
<td>Read Chapter 15 from Sturkie Avian physiology: Poultry bone development and bone disorder; Factors that regulate osteogenesis; Avian specific characteristics of bone; Tibial dyschondroplasia</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Sept. 9</td>
<td>Physiology of Skeletal Muscle</td>
<td>Read Chapter 16 from Sturkie Avian physiology: Skeletal muscle; What are the mechanisms for post-natal skeletal muscle development? Function of satellite cells; Wooden breast and cause</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Sept. 10</td>
<td>Physiology of Skeletal Muscle</td>
<td></td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Sept. 12</td>
<td>Physiology of Smooth Muscle</td>
<td></td>
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</tr>
<tr>
<td>Sept. 17</td>
<td>Blood and the Immune System</td>
<td>Read Chapter 10 and 17 from Sturkie Avian physiology: Blood and Avian immune system; Molecular mechanism of innate immune response; Primary and secondary lymphoid tissues</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Sept. 19</td>
<td>Exam 1</td>
<td></td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Sept. 24</td>
<td>Physiology of the Nervous System</td>
<td>Read part II-Sensory biology and nervous system. Compare CNS to PNS; Differences between somatic and autonomic nerves; The reflex arc; action potentials; somatic motor nerves and autonomic motor nerves; differences in sympathetic and parasympathetic division/ Avian circadian system</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Sept. 26</td>
<td>Physiology of the Nervous System Cont.</td>
<td></td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 1</td>
<td>Flight</td>
<td>Necessary components for flight; Metabolic rate during flight; The function of different organs during the flight; Migration</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 3</td>
<td>Respiratory Physiology</td>
<td>Read Chapter 13 from Sturkie Avian physiology: Respiration; Compare the differences of anatomy of respiratory system between birds and human; Respiratory muscles and bones during inspiration and expiration in birds</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 8</td>
<td>Respiratory Physiology Cont.</td>
<td></td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 10</td>
<td>GI Physiology</td>
<td>Read Chapter 14 from Sturkie: GI anatomy and physiology; Gastrointestinal cycle; Effects of neural and hormone on nutrient digestion and motility; Enzymes secreted by GI in avians; Regulation of food intake</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 15</td>
<td>GI Physiology Cont.</td>
<td></td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Oct. 17</td>
<td>Interaction of gut and microbiome</td>
<td>Read Chapter 21 from Sturkie: Regulation of food intake; Gut health and microbiomes (read recent publications posted on eCampus)</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Oct. 22</td>
<td>Renal Physiology</td>
<td>Read Chapter 12 from Sturkie Avian physiology: Osmoregulatory systems of birds; Glomerular filtration rate of special birds; Nitrogen excretion</td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Oct. 24</td>
<td>Renal Physiology</td>
<td></td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 29</td>
<td>Thermoregulation</td>
<td>Thermogenesis and thermolysis; Heat production and thermoregulation; Thermal neutral zones; Heat stress</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Oct. 31</td>
<td>Exam 2</td>
<td></td>
<td>Est. 6 hours</td>
</tr>
<tr>
<td>Nov. 5</td>
<td>Sensory Organs</td>
<td>Read Chapter 6, 7 and 8 from Sturkie Avian physiology: Sensory biology, avian hearing, chemical senses, and magnetoreception in birds and its use in long-distance migration</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 7</td>
<td>Endocrinology</td>
<td>Read Chapter 17 and 41 from Sturkie: Endocrine pancreas, and actions of toxicants and endocrine-desrupting chemicals in birds; Stress and animal behavior</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 12</td>
<td>Endocrinology Cont.</td>
<td></td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 14</td>
<td>Reproductive Physiology-Female</td>
<td>Read Chapter 25 and 28 from Sturkie: reproduction in the female and the role of hormones on hens</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 19</td>
<td>Reproductive Physiology-Male</td>
<td>Read Chapter 29 from Sturkie Avian physiology: Reproduction in male birds; Hormone effects of testicular function; Spermatogenesis</td>
<td>Est. 5 hours</td>
</tr>
<tr>
<td>Nov. 21</td>
<td>Student Oral presentation</td>
<td>Online students can upload their files to eCampus</td>
<td>Est. 5 hours</td>
</tr>
</tbody>
</table>
### Determination of Course Grade:

<table>
<thead>
<tr>
<th>Points:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Lecture Exam 1</td>
</tr>
<tr>
<td>Major Lecture Exam 2</td>
</tr>
<tr>
<td>Five (20 point) lecture quizzes</td>
</tr>
<tr>
<td>*Final Lecture Exam</td>
</tr>
<tr>
<td>Research Paper (Special topic)</td>
</tr>
<tr>
<td>Oral Presentation (Special topic)</td>
</tr>
</tbody>
</table>

### Point Total / Grade Distribution:

<table>
<thead>
<tr>
<th>Grade:</th>
</tr>
</thead>
<tbody>
<tr>
<td>540-600 (90-100%)</td>
</tr>
<tr>
<td>480-539 (80-89%)</td>
</tr>
<tr>
<td>420-479 (70-79%)</td>
</tr>
<tr>
<td>360-419 (60-69%)</td>
</tr>
<tr>
<td>Less than 360</td>
</tr>
</tbody>
</table>

### Absenteeism Policy

This policy is drafted in accordance with the Texas A&M University Regulations Manual. Absences from exams and quizzes will be excused for reasons including the following:

1. Participation in an activity appearing on the University authorized list.
2. Death or major illness in a student's immediate family.
3. Participation in legal or administrative procedures that require a student's presence.
4. Illness of a dependent family member.
5. Religious holy day.
6. Confinement because of illness.
7. Required participation in military duties.

The student must notify the instructor of the excused absence, in person or by telephone, within 48 hours of the last date of absence. Makeup exams will be scheduled and must be completed within 30 days of the last date of absence. Unexcused absences on dates of quizzes or exams will result in grades of F (0 points) on that exam.
In addition to these University mandated regulations; the following policies also apply to absenteeism in this course:

1. A log of attendance will be kept by the instructor for all class and lab meetings.
2. Students will acknowledge attendance by signing (not printing) a daily attendance log.
3. **Unexcused absences on days of exams and quizzes will result in final grades of zero (0) on missed exams or quizzes.**
4. All makeup exams due to excused absences will have an oral question component in addition to the written portion of the exam per the discretion of the instructor.

Students who are requesting an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code; See Student Rule 7 of the Texas A&M University Student Rules: (http://student-rules.tamu.edu/rule07).

**Academic Integrity**

**Aggie Honor Code:**

For many years, Aggies have followed a Code of Honor, which is stated in this very simple verse: **“An Aggie does not lie, cheat, or steal or tolerate those who do.”** The Aggie Code of Honor is an effort to unify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. It only calls for honesty and integrity, characteristics that Aggies have always exemplified. The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other. Following each quiz or examination in this course, you will attest to your adherence to this code by signing your name by the following statement:

**“On my honor as an Aggie, I have neither given nor received unauthorized aid on this academic work.”**

Student signature: _____________________
Date: _____________________

**Plagiarism and Copyrighted Materials**

The handouts used in this course are copyrighted. By "handouts," I mean all materials generated for this class, which include but are not limited to syllabi, quizzes, exams, lab problems, in-class materials, review sheets, and additional problem sets. Because these materials are copyrighted, you do not have the right to copy the handouts, unless I expressly
grant permission. As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writings, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues without which research cannot be safely communicated. Anyone suspected of plagiarism will be given an oral exam on the material in question. Anyone committing plagiarism will receive a grade of "F" in this course. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section "Scholastic Dishonesty." Refer to the Honor Council Rules and Procedures at http://aggiehonor.tamu.edu

Americans with Disabilities Act (ADA) Policy Statement:

The Americans with Disabilities Act (ADA) is a federal antidiscrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities located in White Creek Complex on west campus, or call 979-845-1637 or visit website at: http://disability.tamu.edu.
Course Change Request

Date Submitted: 05/09/19 3:50 pm

Viewing: **POSC 611: Advanced Egg & Poultry Meat Processing**

Also listed as: **NFSC 611**

Formerly known as: **FSTC 611**

Last approved: 01/30/18 3:22 am

Last edit: 05/13/19 4:49 pm

Changes proposed by: mfarrell

- **NFSC 611:** Department of Nutrition and Food Science
- Department of Poultry Science
- **NFSC 611:** Department of Nutrition and Food Science
- **POSC 611:** Poultry Science

Faculty Senate Number

Contact(s)

In Workflow
1. POSC Reviewer GR
2. POSC Department Head
3. NFSC Department Head
4. Curricular Services Review
5. AG Committee Preparer GR
6. AG Committee Chair GR
7. AG College Dean GR
8. GC Preparer
9. GC Chair
10. Faculty Senate Preparer
11. Faculty Senate
12. Provost II
13. President
14. Curricular Services
15. Banner

Approval Path
1. 05/09/19 3:52 pm
   Morgan Farnell (mfarrell): Approved for POSC Reviewer GR
2. 05/09/19 6:46 pm
   David Caldwell (caldwell): Approved for POSC Department Head
3. 05/10/19 11:38 am
   Stephen Talcott (stalcott): Approved for NFSC Department Head
4. 05/13/19 4:52 pm
   Terra Bissett (t.bissett): Approved for Curricular Services Review
5. 05/14/19 11:34 am
   Lauren Johnson (ljohnson): Approved for AG Committee Preparer GR
6. 05/15/19 4:34 pm
   David W. Reed (dwreed): Approved for AG Committee Chair GR
7. 06/17/19 10:08 am
   Mary Bryk (bryk): Approved for AG College Dean GR
8. 07/03/19 9:40 am
   LaRhesa Johnson (ljohnson): Approved
### Rationale for Course Edit

**Other**

The proposed changes are part of a routine curriculum review.

### Course Information

**Complete Course Title:** Advanced Egg & Poultry Meat Processing

**Abbreviated Course Title:** ADV EGG-POULTRY MEAT PROCESS

**Catalog course description:**
Focuses on egg markets, egg processing, grading, packaging, safety, quality and consumer acceptance of shell eggs; poultry meat processing (specifically turkeys and broilers), meat quality, markets, consumer acceptance of poultry meat and safety.

**Prerequisites and Restrictions:**
Graduate classification.

**Concurrent Enrollment:**
No

**Should catalog prerequisites / concurrent enrollment be enforced?**
No

**Crosslistings:**
Yes

**Crosslisted With:**
NFSC 611

**Stacked:**
No

**Semester:**
Summer 2019

**Credit Hour(s):** 3

**Contact Hour(s) (per week):**
Lecture: 3
Lab: 0
Other: 0
Total: 3

**Repeatable for credit?**
No

**Three-peat?**
No

**CIP/Fund Code:** 0110010005

**Default Grade Mode:** Letter Grade (G)

**Alternate Grade Modes:** Satisfactory/Unsatisfactory

### Contact Information

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morgan Farnell</td>
<td><a href="mailto:mfarnell@tamu.edu">mfarnell@tamu.edu</a></td>
<td>979-847-7363</td>
</tr>
</tbody>
</table>

### History

1. Jan 23, 2017 by Allison Noll (almoore_14)
2. Jan 30, 2018 by Sandra Williams (sandra-williams)
Method of instruction  Lecture

Will this course be taught at another branch?  No

Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)  Yes

Learning Outcomes

Add a justification statement indicating the department/college faculty determined the learning outcomes are appropriate for the course.

The learning outcomes on the syllabus used for the face to face version of the distance courses were compared with the distance section syllabus. Both the face to face and distance courses had the same learning outcomes. Learning outcomes for the non-traditional courses were equivalent to the traditional course.

Hours

Add a justification statement indicating the department/college faculty determined the contact hours are appropriate for the course.

Course instructors use the same content for the face to face courses for the non-traditional courses.

Required (select program)

Elective (select program)  

<table>
<thead>
<tr>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(MAG-POSC) Master of Agriculture in Poultry Science</td>
</tr>
<tr>
<td>(MS-POSC) Master of Science in Poultry Science</td>
</tr>
<tr>
<td>(PHD-POSC) Doctor of Philosophy in Poultry Science</td>
</tr>
</tbody>
</table>

Course Syllabus

Syllabus:  Upload syllabus

Upload syllabus  

POSC 611 - Non Traditional Syllabus.pdf
POSC 611 - Traditional Syllabus.pdf

Letters of support or other documentation  No

Additional information  Change approved via prefix change request: https://nextcatalog.tamu.edu/miscadmin/?key=60/
<table>
<thead>
<tr>
<th>Reviewer Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sandra Williams (sandra-williams)</strong> (03/23/18 4:04 pm): Rollback: You need to attach a traditional syllabus and a non-traditional syllabus (if applicable).</td>
</tr>
<tr>
<td><strong>Terra Bissett (t.bissett)</strong> (05/13/19 4:49 pm): Syllabi received.</td>
</tr>
</tbody>
</table>

Reported to state?  

- Add  
- No

Key: 13555
Professor: Dr. Christine Alvarado  
Room: 352B Kleberg  
Office: 979-847-7345  
Email: calvarado@poultry.tamu.edu  
Office Hours: by appointment; I have an open door policy with student during the work day and will usually respond to emails within 24 hours

Texts (Highly Recommended):  

Resources:  
The following are suggested sources for information during the semester and can be found at the campus library:  
- *Food Microbiology* (several available, Jay, Frazier)  

Scheduled Meeting Times:  
Tuesday/Thursday 9:35-10:50 KLCT 127

Teaching Philosophy:  
The art of teaching encompasses the ability to understand students and their learning styles, the ability to be prepared with deep subject matter knowledge and current information and the ability to present it in an enthusiastic and passionate method of delivery. Lectures should be enthusiastic, clear, and organized with current information and new innovations. Lecturer should know the learning style and long-term goals of the students in the class and adjust the presentation style accordingly. The instructor's role is not only to prepare students for a career with the knowledge and the skills necessary for success but also to advise the students. As an advisor, it is the instructor's duty to create and maintain contacts with industry, recruitment personnel, and the University career center to expose the students to a wide variety of career opportunities.

Course Description:  
A course in egg and poultry meat processing. The focus of the portion of this course will be egg markets, egg processing, grading, packaging, safety, quality and consumer acceptance of shell eggs. The remainder of the course will focus on poultry meat processing (specifically turkeys and broilers), meat quality, markets, consumer acceptance of poultry meat and safety. Prerequisites: junior or senior classification or approval of instructor.
**Learning Outcomes:**
To provide the students with an appreciation and general knowledge of shell eggs and poultry meat processing and the overall importance of the poultry industry so they can be more informed consumers and employees in their chosen occupation. At the end of the course students will be able to:

- Identify the steps of egg and poultry meat processing
- Describe the impact of processing techniques on food safety and meat quality
- Analyze the inputs for determining yield and efficiency for egg and poultry meat processing markets

**Assessment of Objectives:**
- Short answer and discussion exams will be used to gauge the above learning objectives
- Interactive websites or additional readings followed by discussions in class will be used to measure student understanding of material
- Written assignments to include experiences and reflections after viewing 1) retail poultry meat and 2) egg markets in local grocery stores and supermarkets.

**Extra Credit:**
There will be no extra credit offered in this class.

**POSC 611 Project:**
During the first week of classes, please send me a short biography of yourself. Please indicate your goals (working as well as life goals) and what interests you have in Poultry Science specifically related to foods (chicken, turkeys, eggs). This can be a personal interest or a work-related interest. I would like to come up with a project that can help you or your company and/or can help our department with extension material or teaching material related to poultry processing. Therefore, this project will be individualized to fit your interests and needs. Some examples of past projects have been HACCP teaching scenarios and case studies, HACCP plans development, animal welfare audit reports, hot topic educational materials, etc. The project “final report” will be due the final class period and will consist of 5 written pages or a 20 min PPT presentation. The material to include in the final report or ppt is individualized and will be discussed within each project assignment. Details of the project and the report will be clarified with individual discussions with Dr. Alvarado.

**Course Requirements and Grading Scale:**
Your grade in this course is based on the points accumulated from assignments, major exams, and the final examination. The grading scale will NOT be raised for any reason!! A bell curve or other preconceived grading scales will not be used in the course.

You (the student) will be responsible for all material covered in class and any assigned reading for each major examination. The final exam will be *comprehensive* in the scope of its coverage and ALL students must take the final exam.
POSC Class Grading Scale:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Exams (3)</td>
<td>50%</td>
</tr>
<tr>
<td>Project</td>
<td>20%</td>
</tr>
<tr>
<td>Assignments (2)</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

90-100%        A  
80-89%         B  
70-79%         C  
60-69%         D  
59 and below  F

**Attendance Policy:**
Class attendance is viewed as the student’s responsibility and a reflection of maturity. Therefore, class attendance is HIGHLY RECOMMENDED! See [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07) and [http://student-rules.tamu.edu/rule10](http://student-rules.tamu.edu/rule10) for more information about attendance and make-up policies per Texas A&M rules.

**Make-up Policy:**
If an absence is excused, the instructor will either provide the student an opportunity to make up any quiz, exam or other work that contributes to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor. If the instructor has a regularly scheduled make up exam, students are expected to attend unless they have a university approved excuse.

The make-up work must be completed in a timeframe not to exceed 30 calendar days from the last day of the initial absence. The reasons absences are considered excused by the university are listed below. See Student Rule 7 for details ([http://studentrules.tamu.edu/rule07](http://studentrules.tamu.edu/rule07)). The fact that these are university-excused absences does not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.

1) Participation in an activity that is required for a class and appears on the university authorized activity list at [https://stuactonline.tamu.edu/app/sponsauth/index](https://stuactonline.tamu.edu/app/sponsauth/index)
2) Death or major illness in a student's immediate family.
3) Illness of a dependent family member.
4) Participation in legal proceedings or administrative procedures that require a student's presence.
5) Religious holy day. NOTE: Prior notification is NOT required.
6) Injury or illness that is too severe or contagious for the student to attend class.
   a) Injury or illness of three or more class days:
      1. Student will provide a medical confirmation note from his or her medical provider within one week of the last date of
      2. the absence (see Student Rules 7.1.6.1)
   b) Injury or illness of less than three class days:
3. Student will provide one or both of these (at instructor’s discretion), within one week of the last date of the absence:
   (i.) Texas A&M University Explanatory Statement for Absence from Class form available at http://attendance.tamu.edu or
   (ii.) Confirmation of visit to a health care professional affirming date and time of visit.

7) Required participation in military duties.
8) Mandatory admission interviews for professional or graduate school that cannot be rescheduled.
9) 7.1.9 Mandatory participation as a student-athlete in NCAA-sanctioned competition.
10) 7.1.10 In accordance with Title IX of the Educational Amendments of 1972, Texas A&M University shall treat pregnancy (childbirth, false pregnancy, termination of pregnancy and recovery therefrom) and related conditions as a justification for an excused absence for so long a period of time as is deemed medically necessary by the student’s physician. Requests for excused absence related to pregnancy should be directed to the instructor; questions about Title IX should be directed to the University Title IX Coordinator.

Other absences may be excused at the discretion of the instructor with prior notification and proper documentation. In cases where prior notification is not feasible (e.g., accident or emergency) the student must provide notification by the end of the second working day after the absence, including an explanation of why notice could not be sent prior to the class.

**Expectation of Students:**
Attendance, participation, willingness to learn, courtesy, interest, honesty

**Special Accommodations for Students:**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information visit http://disability.tamu.edu/

**Academic Dishonesty and Conduct Rules:**
“An Aggie does not lie, cheat or steal, or tolerate those who do.”
For additional information, please visit: http://aggiehonor.tamu.edu/

Academic Integrity – As commonly defined, PLAGIARISM consists of passing off as one’s own ideas, words, writing, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues’ without which research cannot be safely
communicated. Anyone suspected of plagiarism will be dealt with according to University policy which may result in an “F” in the course and even expulsion. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Catalog.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Activities</th>
<th>Time (hours)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>SHELL EGGS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week 1</td>
<td>Introduction to class The Egg Industry Overview</td>
<td>Introduce the class, review the syllabus, assignments, grading, egg industry overview</td>
<td>6</td>
</tr>
<tr>
<td>Week 2:</td>
<td>Shell Egg Formation and Structure Egg Assignment</td>
<td>Textbook readings - Egg Formation and Structure; View video of virtual chicken and egg formation, Retail Egg Assignment explained</td>
<td>8</td>
</tr>
<tr>
<td>Week 3</td>
<td>Shell Egg Processing and Composition Shell Egg Quality – Deterioration and Preservation</td>
<td>Textbook readings on shell egg processing and egg quality, online American Egg Board readings and videos on egg quality</td>
<td>10</td>
</tr>
<tr>
<td>Week 4</td>
<td>Shell Eggs and Consumer acceptability</td>
<td>American Egg Board review of consumer acceptance of products and read survey results</td>
<td>8</td>
</tr>
<tr>
<td>Week 5</td>
<td>Egg Assignment Due EXAM</td>
<td>Retail egg assignment Study and take EXAM</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td><strong>MEAT PROCESSING</strong></td>
<td></td>
<td></td>
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<tr>
<td>Week 6</td>
<td>Poultry Meat Industry Overview Project Proposed and accepted</td>
<td>Watt Poultry online reading – review of poultry meat industry Project idea submission and review/acceptance from professor</td>
<td>10</td>
</tr>
<tr>
<td>Week 7</td>
<td>Live Production Impacts and Poultry Processing</td>
<td>Textbook reading – live production impacts</td>
<td>8</td>
</tr>
<tr>
<td>Week 8</td>
<td>Poultry Processing</td>
<td>Textbook readings - Feed Withdrawal and Immobilization, Stunning, Slaughter, and Defeathering, Evisceration and Chilling, Cut-up, Portioning, Watch – processing video</td>
<td>10</td>
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<tr>
<td>Week 9</td>
<td>Religious slaughter/ Humane Slaughter/ Welfare audits</td>
<td>Additional online reading from humane certifications websites/ FSIS website on religious slaughter</td>
<td>8</td>
</tr>
<tr>
<td>Week 10</td>
<td>EXAM Conversion of Muscle to Meat and Yield (Meat Retail assignment explained)</td>
<td>EXAM Textbook readings - Meat and muscle structure and biochemistry and conversion of muscle to meat. Retail meat assignment explained</td>
<td>10</td>
</tr>
<tr>
<td>Week 11</td>
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<td>Additional textbook readings - Meat biochemistry, Meat quality and implications for defects</td>
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<td>Packaging methods, options, and shelf life impacts</td>
<td>10</td>
</tr>
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<td>Exam, Additional reading FSIS websites on regulatory sanitation practices, chemicals used, HACCP prerequisite programs SSOP, SOP, GMS and guidance documents</td>
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<td>Week 14</td>
<td>HACCP and Food Safety</td>
<td>Additional reading FSIS websites on regulatory HACCP and guidance documents</td>
<td>9</td>
</tr>
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<td>Week 15</td>
<td>Food safety and Current topics FINAL EXAM</td>
<td>Online reading on CDC current recalls and cases Final EXAM</td>
<td>10</td>
</tr>
</tbody>
</table>

*TOTAL 135 hours
Dr. Alvarado reserves the right to change this schedule if needed, but advanced notice will be given when possible to the class
Syllabus Fall 20XX
POSC 611 (Advanced Egg and Poultry Meat Processing)

Professor: Dr. Christine Alvarado
Room: 352B Kleberg
Office: 979-847-7345
Email: calvarado@poultry.tamu.edu
Office Hours: by appointment; I have an open door policy with student during the work day and will usually respond to emails within 24 hours

Texts (Highly Recommended):

Resources:
The following are suggested sources for information during the semester and can be found at the campus library:
- *Food Microbiology* (several available, Jay, Frazier)

Scheduled Meeting Times:
Tuesday/Thursday 9:35-10:50 KLCT 127

Teaching Philosophy:
The art of teaching encompasses the ability to understand students and their learning styles, the ability to be prepared with deep subject matter knowledge and current information and the ability to present it in an enthusiastic and passionate method of delivery. Lectures should be enthusiastic, clear, and organized with current information and new innovations. Lecturer should know the learning style and long-term goals of the students in the class and adjust the presentation style accordingly. The instructor's role is not only to prepare students for a career with the knowledge and the skills necessary for success but also to advise the students. As an advisor, it is the instructor's duty to create and maintain contacts with industry, recruitment personnel, and the University career center to expose the students to a wide variety of career opportunities.

Course Description:
A course in egg and poultry meat processing. The focus of the portion of this course will be egg markets, egg processing, grading, packaging, safety, quality and consumer acceptance of shell eggs. The remainder of the course will focus on poultry meat processing (specifically turkeys and broilers), meat quality, markets, consumer acceptance of poultry meat and safety. Prerequisites: junior or senior classification or approval of instructor.
Learning Outcomes:
To provide the students with an appreciation and general knowledge of shell eggs and poultry meat processing and the overall importance of the poultry industry so they can be more informed consumers and employees in their chosen occupation. At the end of the course students will be able to:

- Identify the steps of egg and poultry meat processing
- Describe the impact of processing techniques on food safety and meat quality
- Analyze the inputs for determining yield and efficiency for egg and poultry meat processing markets

Assessment of Objectives:
- Short answer and discussion exams will be used to gauge the above learning objectives
- Interactive websites or additional readings followed by discussions in class will be used to measure student understanding of material
- Written assignments to include experiences and reflections after viewing 1) retail poultry meat and 2) egg markets in local grocery stores and supermarkets.

Extra Credit:
There will be no extra credit offered in this class.

POSC 611 Project:
During the first week of classes, please send me a short biography of yourself. Please indicate your goals (working as well as life goals) and what interests you have in Poultry Science specifically related to foods (chicken, turkeys, eggs). This can be a personal interest or a work-related interest. I would like to come up with a project that can help you or your company and/or can help our department with extension material or teaching material related to poultry processing. Therefore, this project will be individualized to fit your interests and needs. Some examples of past projects have been HACCP teaching scenarios and case studies, HACCP plans development, animal welfare audit reports, hot topic educational materials, etc. The project “final report” will be due the final class period and will consist of 5 written pages or a 20 min PPT presentation. The material to include in the final report or ppt is individualized and will be discussed within each project assignment. Details of the project and the report will be clarified with individual discussions with Dr. Alvarado.

Course Requirements and Grading Scale:
Your grade in this course is based on the points accumulated from assignments, major exams, and the final examination. The grading scale will NOT be raised for any reason!! A bell curve or other preconceived grading scales will not be used in the course.

You (the student) will be responsible for all material covered in class and any assigned reading for each major examination. The final exam will be comprehensive in the scope of its coverage and ALL students must take the final exam.
**POSC Class Grading Scale:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Exams (3)</td>
<td>50%</td>
</tr>
<tr>
<td>Project</td>
<td>20%</td>
</tr>
<tr>
<td>Assignments (2)</td>
<td>10%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

- 90-100% A
- 80-89% B
- 70-79% C
- 60-69% D
- 59 and below F

**Attendance Policy:**

Class attendance is viewed as the student’s responsibility and a reflection of maturity. Therefore, class attendance is HIGHLY RECOMMENDED! See [http://student-rules.tamu.edu/rule07](http://student-rules.tamu.edu/rule07) and [http://student-rules.tamu.edu/rule10](http://student-rules.tamu.edu/rule10) for more information about attendance and make-up policies per Texas A&M rules.

**Make-up Policy:**

If an absence is excused, the instructor will either provide the student an opportunity to make up any quiz, exam or other work that contributes to the final grade or provide a satisfactory alternative by a date agreed upon by the student and instructor. If the instructor has a regularly scheduled make up exam, students are expected to attend unless they have a university approved excuse.

The make-up work must be completed in a timeframe not to exceed 30 calendar days from the last day of the initial absence. The reasons absences are considered excused by the university are listed below. See Student Rule 7 for details (http://studentrules.tamu.edu/rule07). The fact that these are university-excused absences does not relieve the student of responsibility for prior notification and documentation. Failure to notify and/or document properly may result in an unexcused absence. Falsification of documentation is a violation of the Honor Code.

1) Participation in an activity that is required for a class and appears on the university authorized activity list at [https://stuactonline.tamu.edu/app/sponsauth/index](https://stuactonline.tamu.edu/app/sponsauth/index)
2) Death or major illness in a student's immediate family.
3) Illness of a dependent family member.
4) Participation in legal proceedings or administrative procedures that require a student's presence.
5) Religious holy day. NOTE: Prior notification is NOT required.
6) Injury or illness that is too severe or contagious for the student to attend class.
   a) Injury or illness of three or more class days:
      1. Student will provide a medical confirmation note from his or her medical provider within one week of the last date of
      2. the absence (see Student Rules 7.1.6.1)
   b) Injury or illness of less than three class days:
3. Student will provide one or both of these (at instructor’s discretion), within one week of the last date of the absence:
   (i.) Texas A&M University Explanatory Statement for Absence from Class form available at [http://attendance.tamu.edu](http://attendance.tamu.edu) or
   (ii.) Confirmation of visit to a health care professional affirming date and time of visit.

7) Required participation in military duties.
8) Mandatory admission interviews for professional or graduate school that cannot be rescheduled.
9) 7.1.9 Mandatory participation as a student-athlete in NCAA-sanctioned competition.
10) 7.1.10 In accordance with Title IX of the Educational Amendments of 1972, Texas A&M University shall treat pregnancy (childbirth, false pregnancy, termination of pregnancy and recovery therefrom) and related conditions as a justification for an excused absence for so long a period of time as is deemed medically necessary by the student’s physician. Requests for excused absence related to pregnancy should be directed to the instructor; questions about Title IX should be directed to the University Title IX Coordinator.

Other absences may be excused at the discretion of the instructor with prior notification and proper documentation. In cases where prior notification is not feasible (e.g., accident or emergency) the student must provide notification by the end of the second working day after the absence, including an explanation of why notice could not be sent prior to the class.

**Expectation of Students:**
Attendance, participation, willingness to learn, courtesy, interest, honesty

**Special Accommodations for Students:**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information visit [http://disability.tamu.edu/](http://disability.tamu.edu/)

**Academic Dishonesty and Conduct Rules:**
“An Aggie does not lie, cheat or steal, or tolerate those who do.”
For additional information, please visit: [http://aggiehonor.tamu.edu/](http://aggiehonor.tamu.edu/)

Academic Integrity – As commonly defined, PLAGIARISM consists of passing off as one’s own ideas, words, writing, etc., which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have the permission of that person. Plagiarism is one of the worst academic sins, for the plagiarist destroys the trust among colleagues’ without which research cannot be safely
communicated. Anyone suspected of plagiarism will be dealt with according to University policy which may result in an “F” in the course and even expulsion. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Catalog.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Activities</th>
<th>Time (hours)*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SHELL EGGS</td>
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<tr>
<td>Week 1</td>
<td>Introduction to class</td>
<td>Introduce the class, review the syllabus, assignments, grading, egg industry overview</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>The Egg Industry Overview</td>
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<tr>
<td>Week 2:</td>
<td>Shell Egg Formation and Structure</td>
<td>Textbook readings - Egg Formation and Structure; View video of virtual chicken and egg formation, Retail Egg Assignment explained</td>
<td>8</td>
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<tr>
<td></td>
<td>Egg Assignment</td>
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<tr>
<td>Week 3</td>
<td>Shell Egg Processing and Composition</td>
<td>Textbook readings on shell egg processing and egg quality, online American Egg Board readings and videos on egg quality</td>
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<td>Shell Egg Quality – Deterioration and</td>
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<td>Preservation</td>
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<tr>
<td>Week 4</td>
<td>Shell Eggs and Consumer acceptability</td>
<td>American Egg Board review of consumer acceptance of products and read survey results</td>
<td>8</td>
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<td>Egg Assignment Due</td>
<td>Retail egg assignment</td>
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<td>EXAM</td>
<td>Study and take EXAM</td>
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</tbody>
</table>

*TOTAL 135 hours
Dr. Alvarado reserves the right to change this schedule if needed, but advanced notice will be given when possible to the class
Course Change Request

Date Submitted: 05/02/19 5:44 pm

Viewing: **TCMT 634 622**: Value Chain Management

Also listed as: **TCMT 622**

Formerly known as: **TCMT 622**

Last approved: 03/21/18 3:25 am

Last edit: 06/12/19 1:16 pm

Changes proposed by: leslie.ehlers

Catalog Pages referencing this course:
- **TCMT 622**: Department of Engineering Technology and Industrial Distribution
  - TCMT - Technical Management

Contact(s)

In Workflow
1. ETID Department Head
2. Curricular Services Review
3. EN Committee Preparer GR
4. EN Committee Chair GR
5. EN College Dean GR
6. GC Preparer
7. GC Chair
8. Faculty Senate Preparer
9. Faculty Senate
10. Provost II
11. President
12. Curricular Services
13. Banner

Approval Path
1. 04/13/19 11:22 pm
   V. Jorge Leon (jleon):
   Approved for ETID Department Head
2. 04/16/19 4:01 pm
   Terra Bissett (t.bissett):
   Rollback to Initiator
3. 05/10/19 11:32 am
   V. Jorge Leon (jleon):
   Approved for ETID Department Head
4. 05/14/19 10:10 am
   Terra Bissett (t.bissett):
   Approved for Curricular Services Review
5. 06/13/19 4:46 pm
   Jennifer Versucruz (jveracruz):
   Approved for EN Committee Preparer GR
6. 06/20/19 10:34 am
   Harry Hogan (h-hogan):
   Approved for EN Committee Chair GR
7. 06/20/19 10:36 am
   Harry Hogan (h-hogan):
   Approved for EN College Dean GR
8. 07/03/19 9:40 am
   LaRhesa Johnson (ljohnson):
   Approved for GC Preparer
9. 07/29/19 9:57 am
   LaRhesa Johnson (ljohnson):
   Approved for GC Chair
Rationale for Course Edit

The proposed changes are part of a routine curriculum review.

Course prefix: TCMT
Course number: 634

Department: Eng Tech & Ind Distribution
College/School: College of Engineering
Academic Level: Graduate
Effective term: Fall 2020

Complete Course Title: Value Chain Management
Abbreviated Course Title: VALUE CHAIN MANAGEMENT

Catalog course description:
Selected topics for the quantitative management of an optimal operation of a supply-chain; emphasis on the interdependencies among supply-chain processes, integration of engineering, operational and financial metrics, supply-chain capability and asset management.

Prerequisites and Restrictions:
Admission to the Master of Engineering Technical Management program.

Should catalog prerequisites / concurrent enrollment be enforced?
No

Crosslistings:
No Crosslisted With
No Stacked with

Semester: 3
Contact Hour(s) (per week):
Lecture: 3
Lab: 0
Other: 0
Total: 3

Repeatable for credit?
No

CIP/Fund Code: 1515010006
Default Grade Mode: Letter Grade (G)
Method of instruction:
Lecture

Will this course be taught at another branch?
No

Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)
Yes

Learning Outcomes

Add a justification statement indicating the department/college faculty determined the learning outcomes are appropriate for the course.

This course will only be offered in a non-traditional format; therefore, it will not have traditional face-to-face learning outcomes to compare to.

Hours

Name | E-mail | Phone
--- | --- | ---
Leslie Ehlers | Leslie.Ehlers@tamu.edu | 979-458-5083
Jordan Sass | jsass@tamu.edu | 979-458-5083
Dr. Ben Zoghi | zoghi@tamu.edu | 979-676-3533

Add a justification statement indicating the department/college faculty determined the learning outcomes are appropriate for the course.

TCMT 634: Value Chain Management
https://nextcatalog.tamu.edu/courseleaf/courseleaf.cgi?page=/courseadm...
Add a justification statement indicating the department/college faculty determined the contact hours are appropriate for the course.

Students will have 15 weeks to complete the course. Each week, students will be given about 3 hours of activities seen in face-to-face offerings in the format of audio and video lectures, podcasts, videos, online discussions, and/or group work. Students will have about 90 hours of work outside of class time such as reading from assigned books/articles/case studies and completing assignments such as papers, quizzes, and course projects.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will this course be taught as a distance education course?</td>
<td>Yes</td>
</tr>
<tr>
<td>I verify that I have reviewed the FAQ for Export Control Basics for Distance Education.</td>
<td>Yes</td>
</tr>
<tr>
<td>Is 100% of this course going to be taught in Texas?</td>
<td>Yes</td>
</tr>
<tr>
<td>Will classroom space be needed for this course?</td>
<td>No</td>
</tr>
</tbody>
</table>

This will be a required course or an elective course for the following programs:

- Required (select program)
- Elective (select program)

---

**Course Syllabus**

### Syllabus:

Upload syllabus

<table>
<thead>
<tr>
<th>Upload syllabus</th>
<th>TCMT 622 Value Chain Management-G71117.docx</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TCMT 634 Value Chain Management Syllabus.pdf</td>
</tr>
</tbody>
</table>

### Letters of support or other documentation

No

### Additional information

**Reviewer Comments**

- **Terra Bissett (t.bissett) (04/16/19 4:01 pm)**: Rollback: Syllabus: please update course prefix, syllabus shows METM.
- **Terra Bissett (t.bissett) (05/14/19 10:10 am)**: Updates received.
Course title and number  TCMT 634: Value Chain Management
Term (e.g., Fall 200X)  Fall 2019
Meeting times and location  Online: eCampus platform

Course Description and Prerequisites

Selected topics for the quantitative management and optimal operation of a value-chain. Emphasis is given to the interdependencies among value-chain processes, integration of engineering, operational and financial metrics, supply-chain capability, and asset management.

Prerequisite: Admission into the METM program

Learning Outcomes or Course Objectives

Upon completion of this course, students will be able to:
   a) Demonstrate knowledge of what Is a value chain, its business functions and importance (3,5,6,7,8)
   b) Describe the impact of strategic network decisions on supply chain performance and solve simple network design problems (1,3)
   c) Explain and recognize the value of information and coordination in the supply chain (1,3,7,8,10)
   d) Perform inventory analysis and produce inventory policies to achieve desired customer service levels (1,3,6,7,8,9)
   e) Explain KPI systems for supply chain performance integrating engineering, operations and financials (2,3,4,5,6,8,9)
   f) Explain fundamental mechanisms for value chain integration (1,3,8)
   g) Recognize the importance of supply contract and describe the different types of contracts (3,6,7)
   h) Recognize the importance of strategic supply chain alliances and describe mechanisms for strategic alliances (3,6,7)
   i) Explain a framework for coordinated product and supply chain design (1,3)

Instructor Information

Name  Dr. Jorge Leon
Telephone number  (979) 847-74993
Email address  jleon@tamu.edu
Office hours  Monday & Wednesday: 9:00am – 11:00am
Office location  117-E Thompson Hall

Getting Started

To get started within this course, you will need to:
   • Review the syllabus in its entirety
   • Login to the course website, eCampu (see directions below), to:
     o ensure that you have access and the correct plug-ins installed,
     o update your user profile,
     o spend some time becoming familiar with the course layout, and
     o complete the introductory forum.

Note: Additional details to complete these activities can be found within the eCampus.
Textbook and/or Resource Material

Required Textbook and Resource Materials:

Supplemental Textbook and Resource Materials:
- Supplemental notes and exercises will be provided online.

eCampus:
This course will use Texas A&M eCampus, powered by Blackboard Learn, as the virtual classroom. Within eCampus, you can find all course related content and assessments (including but not limited to course materials, content, videos, activities, assessments, etc.) The recommended browsers for eCampus access are Mozilla Firefox or Google Chrome (Internet Explorer is not recommended). For additional information on support browsers for eCampus, please visit http://tx.ag/eCampusBrowserSupport. To login to eCampus:
- Go to http://ecampus.tamu.edu
- Click the Login button
- Use your Texas A&M NetID and password to login

Once logged into eCampus, you will see a list of all courses for which you are enrolled in for the semester. To navigate this course, click on the name of the course. If you have any problems logging into the course, please see the technology support section below.

Technology Requirements:
- Reliable and frequent access to a computer and to the high-speed Internet. If you do not have frequent and reliable access to a computer with Internet connection, please contact the instructor to discuss your situation and determine an appropriate solution.
- To attend virtual office hours, students will need to make sure they have setup Bb Collaborate to run on their computer(s) and mobile devices. Please visit http://blackboard.force.com/publickbarticleview?id=kA770000000CbIW to check your system requirements and test your connection.
  - It is required to have a microphone and webcam when using Bb Collaborate. While many student use a built in webcam, it is recommended to have a headset with a microphone, such as a smart phone headset, for the virtual office hours and group collaboration.

Technology Recommendations:
- Google Hangouts can also be used to work collaboratively in a virtual environment for group projects. Students will need to make sure they have claimed a Texas A&M Google account. To claim and learn more about your account, please visit http://google.tamu.edu.

Attendance Policy

Attendance and course participation will be measured by watching the video lectures, participation in discussion forums, submitting assignments, taking quizzes and exams. Students should be logging into the course to view videos and participate in the course 2-3 times per week. Students not participating in the course, will be notified by the instructor.

Note: Federal regulations require the university to confirm whether or not students began attendance in all courses if they are recipients of certain forms of financial aid (ie. 34 CFR 668.21, 34 CFR 674.16(f), 34 CFR 676.16(d), & 34 CFR 685.303(b)(3)). Thus, faculty may be required to verify attendance within Howdy for these students. Also, if a student receives a F, I, X, W, or U, faculty must report the last day of attendance. For distance education the attendance is measured by academic-related activity within Bb Learn (ie. submitting an assignment, taking an exam/quiz, completing an interactive tutorial/computer-assisted instruction, participating in an online discussion about the course, or initiating contact with the faculty member to inquire about the course). Logging into an online class without actively participating or seeking academic advising/counseling is not considered academic activity.
Late Work Policy
LATE WORK is not accepted except for university excused absences. This course relies on discussion, interaction, and group work among class members. Therefore it is essential that work be completed on schedule. At the beginning of every module, you should spend time planning. Read the learning modules very carefully. Punctuality is especially important when assignments impact your classmates. If your schedule impacts others, notify them and me and make alternative arrangements.

If an unforeseen event(s) arises such as a university excused absence, you must follow the TAMU student rule regarding attendance to makeup these assignments. For more information on TAMU excused absences, please visit http://studentrules.tamu.edu/rule07. If you do not have a university excused absence and miss an assignment, you may see a deduction of a point or two in your overall grade. If this is a rare occurrence and your work for this class it otherwise excellent, it should make no difference in your final grade for the course. It is only when work is frequently late and/or quality of the work is consistently below standard that your final grade will suffer. In those rare circumstances where an emergency takes you away from the course for an extended period of time, contact your instructor right away to make arrangements.

Course Copyright Statement
The materials used within this course are copyrighted. These materials include, but are not limited to, the syllabi, quizzes, exams, lab problems, online handouts, course videos, etc. Because these materials are copyrights, you do not have the right to copy or distribute these materials, unless permission is expressly granted.

Incomplete Grade
Grades of “INCOMPLETE” will be given only for certifiable medical reasons or in other extraordinary circumstances arranged in advance. If you are planning to be away from your usual location (travel, vacation, etc.) during this course, consider dropping the course or discuss your situation with me and we can see if you will be disadvantaged by your mobility or impacting others’ work.

Communication Expectations
The best way to contact the instructor and graduate assistant for this course is via email (see contact information at the top of the syllabus). Students should expect a response from the instructor or graduate assistant no later than 48 hours after an email is sent or voicemail is left.

Course assignments, projects, and other assessments will be graded no later than 7 days after the due dates posted within the syllabus and eCampus calendar. If dates need to be adjusted based on unforeseen circumstances, an announcement will be sent from eCampus.

Netiquette Expectations
Netiquette is network etiquette. Netiquette covers both common courtesy online and the informal when communication with other online. TAMU Instructional Technology Services provides some general netiquette rules that students and faculty are expected to follow within this course. For more information on netiquette, please visit http://its.tamu.edu/Distance_Education/Netiquette_Aggie_Honor_Code.php.

Grading Scale

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Percentage</th>
<th>Total Points</th>
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<tbody>
<tr>
<td>A</td>
<td>100.00% - 90.00%</td>
<td>100.00 – 90.00</td>
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<tr>
<td>B</td>
<td>89.99% - 80.00%</td>
<td>89.99 – 80.00</td>
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<tr>
<td>C</td>
<td>79.99% - 70.00%</td>
<td>79.99 – 70.00</td>
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<tr>
<td>D</td>
<td>69.99% - 60.00%</td>
<td>69.99 – 60.00</td>
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<tr>
<td>F</td>
<td>Less than 59.99%</td>
<td>Less than 59.99</td>
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Course Topics, Calendar of Activities, Major Assignment Dates
Your activities in this course will include:
- Online lectures explaining the different topics covered.
- Online exercises where you will use simulators, calculators and games to reinforce the concepts learned.
- Assigned readings to complement and reinforce the content delivered in the lectures.
- Online class interactions providing opportunities to work in groups.

Learning assessments include:
- Final exam: a comprehensive exam at the end of the semester.
- Quizzes: Weekly quizzes assessing your learning of new material covered.
- Participation in class activities: Will measure your diligence in completing assigned course activities.
  - Quizzes: 60%
  - Final Exam: 15%
  - Participation: 25%

<table>
<thead>
<tr>
<th>Course Outline</th>
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<tbody>
<tr>
<td><strong>Week 1</strong></td>
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<tr>
<td><strong>Module 01:</strong> Introduction to value-chains</td>
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<tr>
<td><strong>Read:</strong> Chapter 1</td>
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<tr>
<td><strong>Concepts</strong></td>
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<tr>
<td>- What is a value chain and what are main management challenges?</td>
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<tr>
<td>- Why value chain management?</td>
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<tr>
<td>- Key aspects in value chain management</td>
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<tr>
<td><strong>Quiz #1</strong></td>
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| **Week 2** | **Week 02: Activities & Assignments** | **Deadlines** |
| **Module 02:** The Value of Information – Lesson 2.1 | | |
| **Online group exercise:** The Beer Game | | |
| - Describe and reproduce the Bullwhip effect | | |
| **Quiz #2** | Next week | |

| **Week 3** | **Week 03: Activities & Assignments** | **Deadlines** |
| **Module 02:** The Value of Information – Lesson 2.2 | | |
| **Read:** Chapter 5 | | |
| - What is the Bullwhip Effect and what causes it? 5.1, 5.2.2 | | |
| - How to minimize the Bullwhip Effect. 5.2.3, 5.3, 5.4, 5.7, 5.9 | | |
| **Quiz #3** | Next week | |

| **Week 4** | **Week 04: Activities & Assignments** | **Deadlines** |
| **Module 03:** Inventory management Lesson 3.1 | | |
| **Read:** Chapter 2: Section 2.1 | | |
| - The economic and operational role of inventory | | |
| - Inventory management framework | | |
| - Inventory modeling concepts: Inventory costs and customer service level, reorder point, safety stock and order quantity | | |
| - Estimation of demand and lead time probability distribution parameters | | |
| **Quiz #4** | Next week | |

<p>| <strong>Week 5</strong> | <strong>Week 05: Activities &amp; Assignments</strong> | <strong>Deadlines</strong> |</p>
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<thead>
<tr>
<th>Week 6</th>
<th>Week 06: Activities &amp; Assignments</th>
<th>Deadlines</th>
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<tbody>
<tr>
<td><strong>Module 03: Inventory management – Lesson 3.3</strong>&lt;br&gt;<strong>Read:</strong> Chapter 2: Section 2.2&lt;br&gt;- Continuous review inventory policy (when and how much to order)&lt;br&gt;- Periodic review inventory policy</td>
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<td>Quiz #5</td>
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<tr>
<th>Week 7</th>
<th>Week 07: Activities &amp; Assignments</th>
<th>Deadlines</th>
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<tr>
<td><strong>Module 04: Strategic Network Planning – Lesson 4.1</strong>&lt;br&gt;<strong>Read:</strong> Chapter 3: Sections 3.1, 3.2&lt;br&gt;- Network design decisions&lt;br&gt;- Relevant data and data manipulation&lt;br&gt;- Modeling methods&lt;br&gt;- Solution methods&lt;br&gt;- Application example: what plant should replenish each warehouse?</td>
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<td>Quiz #7</td>
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<tr>
<th>Week 8</th>
<th>Week 08: Activities &amp; Assignments</th>
<th>Deadlines</th>
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<tbody>
<tr>
<td><strong>Module 04: Strategic Network Planning – Lesson 4.2</strong>&lt;br&gt;<strong>Read:</strong> Chapter 3: Sections 3.3&lt;br&gt;- Inventory positioning and logistics coordination</td>
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<tr>
<td>Online exercise: Inventory positioning simulator</td>
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<td>Quiz #8</td>
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<th>Week 9</th>
<th>Week 09: Activities &amp; Assignments</th>
<th>Deadlines</th>
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<tr>
<td><strong>Module 04: Strategic Network Planning – Lesson 4.3</strong>&lt;br&gt;<strong>Read:</strong> Chapter 3: Sections 3.4&lt;br&gt;- Strategic allocation of supply chain resources&lt;br&gt;- Application example: What plant should replenish each warehouse, and what warehouse should serve each region?</td>
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<td>Quiz #9</td>
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<tr>
<th>Week 10</th>
<th>Week 10: Activities &amp; Assignments</th>
<th>Deadlines</th>
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<tbody>
<tr>
<td><strong>Module 05: Supply Contracts – Lesson 5.1</strong>&lt;br&gt;<strong>Read:</strong> Chapter 4: 4.1, 4.2</td>
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<tr>
<td>Week 11</td>
<td>Week 11: Activities &amp; Assignments</td>
<td>Deadlines</td>
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<tr>
<td><strong>Quiz #10</strong></td>
<td><strong>Module 05: Supply Contracts – Lesson 5.1</strong></td>
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<tr>
<td><strong>Read:</strong></td>
<td><strong>Read:</strong> Chapter 4: 4.3, 4.4, 4.5</td>
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<tr>
<td>- Make-to-order supply contracts</td>
<td>- Make-to-stock supply contracts</td>
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<td>- Contracts with asymmetric information</td>
<td>- Contracts for non-critical items</td>
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<th>Week 12</th>
<th>Week 12: Activities &amp; Assignments</th>
<th>Deadlines</th>
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<tbody>
<tr>
<td><strong>Quiz #11</strong></td>
<td><strong>Module 06: Strategic Alliances</strong></td>
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<tr>
<td><strong>Read:</strong></td>
<td><strong>Read:</strong> Chapter 8</td>
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<tr>
<td>- Strategic alliance framework</td>
<td>- Strategic components</td>
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<td>- Third-party logistics (3PL)</td>
<td>- Make-to-stock supply contracts</td>
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<td>- Vendor managed inventory (VMI)</td>
<td>- Contracts with asymmetric information</td>
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<td>- Distributor integration</td>
<td>- Contracts for non-critical items</td>
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<tr>
<td><strong>Homework assignment:</strong></td>
<td><strong>Homework assignment:</strong> #12</td>
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<th>Week 13</th>
<th>Week 13: Activities &amp; Assignments</th>
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<tr>
<td><strong>Quiz #13</strong></td>
<td><strong>Module 07: Coordinated product and supply chain design</strong></td>
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<tr>
<td><strong>Read:</strong></td>
<td><strong>Read:</strong> Chapter 11</td>
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<tr>
<td>- Framework for coordinated product and supply chain design</td>
<td>- Framework for coordinated product and supply chain design</td>
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<tr>
<td>- Design for logistics</td>
<td>- Design for logistics</td>
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<td>- Supplier integration into new product design</td>
<td>- Supplier integration into new product design</td>
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<td>- Mass customization</td>
<td>- Mass customization</td>
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<tr>
<th>Week 14</th>
<th>Week 14: Activities &amp; Assignments</th>
<th>Deadlines</th>
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<tbody>
<tr>
<td><strong>Quiz #14</strong></td>
<td><strong>Module 08: Value-chain capability: integrating engineering, operations and financials</strong></td>
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<tr>
<td><strong>Read:</strong></td>
<td><strong>Read:</strong> eNotes on Value-Chain Capability</td>
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<tr>
<td>- KPI system for the value chain</td>
<td>- KPI system for the value chain</td>
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<tr>
<td>- Value chain capability: supply chain, product and financial performance</td>
<td>- Value chain capability: supply chain, product and financial performance</td>
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<tr>
<th>Week 15</th>
<th>Week 15: Activities &amp; Assignments</th>
<th>Deadlines</th>
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<tbody>
<tr>
<td><strong>Review for final exam</strong></td>
<td><strong>Final exam</strong></td>
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Course Support

In addition to contacting the instructor or graduate assistant for course content related questions, there are a variety of campus resources for course support.

Academic Services Support:
The Office of Graduate & Professional Studies (OGAPS) offers graduate student services and advocates for graduate education for Texas A&M students who are both on-campus and at a distance. For additional information regarding OGAPS, visit: [http://ogaps.tamu.edu/Home](http://ogaps.tamu.edu/Home).

Technology Support:
For technological issues related to eCampus and software, contact the TAMU Help Desk:
- Texas A&M IT Help Desk:
  - Website: [http://hdc.tamu.edu/index.php](http://hdc.tamu.edu/index.php) (Online Chat is available)
  - Phone: (979) 845-8300
  - Email: helpdesk@tamu.edu

The TAMU Help Desk is open 24 hours a day 7 days a week. If your technical problems are unable to be resolved within 48 hours, please contact the instructor for additional assistance.

Technology issues are not an excuse for missing a course requirement – make sure your computer is configured correctly and address issues well in advance of deadlines.

Americans with Disabilities Act (ADA)
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, currently located in the Disability Services building at the Student Services at White Creek complex on west campus or call 979-845-1637. For additional information, visit [http://disability.tamu.edu](http://disability.tamu.edu).

This course uses Blackboard Learn as its online platform. To know more about its accessibility standards please to their website, [http://www.blackboard.com/Platforms/Learn/Resources/Accessibility.aspx](http://www.blackboard.com/Platforms/Learn/Resources/Accessibility.aspx).

Academic Integrity

"An Aggie does not lie, cheat, or steal, or tolerate those who do."

The Aggie Code of Honor is an effort to unify the aims of all Texas A&M men and women toward a high code of ethics and personal dignity. For most, living under this code will be no problem, as it asks nothing of a person that is beyond reason. It only calls for honesty and integrity, characteristics that Aggies have always exemplified. The Aggie Code of Honor functions as a symbol to all Aggies, promoting understanding and loyalty to truth and confidence in each other. For more information please visit, [http://student-rules.tamu.edu/aggiecode](http://student-rules.tamu.edu/aggiecode) and [http://aggiehonor.tamu.edu/](http://aggiehonor.tamu.edu/).

Statement of Plagiarism

All materials generated for this class (which may include but are not limited to syllabi and in-class materials) are copyrighted. You do not have the right to copy such materials unless the instructor expressly grants permission. As commonly defined, plagiarism consists of passing off as one's own the ideas, words, writing, etc. which belong to another. In accordance with this definition, you are committing plagiarism if you copy the work of another person and turn it in as your own, even if you should have permission of that person. Plagiarism is one of the worst academic violations, for the plagiarist destroys trust among others. If you have any questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules, under the section “Scholastic Dishonesty.”

Export Control Statement

United States export control laws regulate the release of goods and technologies that affect U.S. national security or foreign policy interests. Distance education students and course content MUST comply with
these U.S. export control laws. If Texas A&M indicates that you are attempting to access course content from an IP address associated with a country currently subject to economic and trade sanction, your Texas A&M NetID account will be terminated and you will be contacted by the Texas A&M Export Control Office and the Office of Identity Management. For additional visit, https://vpr.tamu.edu/resources/export-controls/resources.