Course Change Request

New Course Proposal

Date Submitted: 02/11/19 12:27 pm

Viewing: **CSCE 711 : Introduction to Modern Cryptography**

Also listed as: **CYBR 711**

Last edit: 03/05/19 11:18 am

Changes proposed by: karrie.bourquin

<table>
<thead>
<tr>
<th>Contact(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
</tr>
<tr>
<td>Daniel Ragsdale</td>
</tr>
<tr>
<td>Sheila Dotson</td>
</tr>
</tbody>
</table>

Course prefix | CSCE | Course number | 711

Department | Computer Science & Engineering

College/School | College of Engineering

Academic Level | Graduate

Academic Level (alternate) | Undergraduate

Effective term | 2020-2021

Complete Course Title | Introduction to Modern Cryptography

Abbreviated Course Title | INTRO MODERN CRYPTOGRAPHY

Catalog course description

Perfectly secret encryption; one-time pad; pseudorandom generators, functions and permutations; security definitions; block ciphers; stream ciphers; cryptanalysis; message authentication codes; hash functions; factoring, discrete log and the Diffie-Hellman problem; trapdoor functions and permutations; public-key encryption; El Gamal and RSA encryption schemes; digital signatures; DSA and RSA signature schemes; identification schemes; the Fiat-Shamir transform; advanced topics include secret sharing, oblivious transfer, zero-knowledge proofs, secure multi-party computation.

Prerequisites and Restrictions

STAT 211 and CSCE 411; graduate classification.
Concurrent Enrollment: No

Should catalog prerequisites / concurrent enrollment be enforced? No

Crosslistings: Yes

Crosslisted With: CYBR 711

Stacked: No

Semester: 3

Credit Hour(s): 3

Contact Hour(s) (per week): 3

Lecture: 3

Lab: 0

Other: 0

Repeatable for credit? No

Three-peat? No

CIP/Fund Code: 1110030006

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) No

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

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

Will classroom space be needed? Yes
This will be a required course or an elective course for the following programs:

Required (select program)

<table>
<thead>
<tr>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(CERT-CYBE) Cybersecurity Engineering - Certificate</td>
</tr>
<tr>
<td>(MS-CPSC) Master of Science in Computer Science</td>
</tr>
<tr>
<td>(PHD-CPSC) Doctor of Philosophy in Computer Science</td>
</tr>
<tr>
<td>(BS-CPSC) Computer Science - BS</td>
</tr>
<tr>
<td>(BS-CEEN) Computer Engineering - BS, Electrical Engineering Track</td>
</tr>
<tr>
<td>(MEN-CECN) Master of Engineering in Computer Engineering</td>
</tr>
<tr>
<td>(MS-CECN) Master of Science in Computer Engineering</td>
</tr>
<tr>
<td>(MCS-CPSC) Master of Computer Science in Computer Science</td>
</tr>
<tr>
<td>(PHD-CECN) Doctor of Philosophy in Computer Engineering</td>
</tr>
</tbody>
</table>

Elective (select program)

---

**Course Syllabus**

Syllabus: Upload syllabus

Upload syllabus: [Introduction to Cryptography Syllabus V2.pdf](Introduc%20tion%20to%20Cryptography%20Syllabus%20V2.pdf)

Letters of support or other documentation: No

Additional information:

Reviewer Comments:

- **Scott Schaefer** *(schaefer) (10/11/18 1:29 pm)*: Rollback: Garay wants to change course.
- **Terra Bissett** *(t.bissett) (02/19/19 1:22 pm)*: Minor edits made to abbreviated course title, catalog course description and prerequisites to comply with catalog style guide.

Reported to state?

Add

CS

Key: 18341
Course title | CSCE 711/CYBR 711 *Introduction to Modern Cryptography*
---|---
Term | TBA
Meeting times and location | TBA

**Course Description and Prerequisites**
At a high level, cryptography aims to construct efficient schemes achieving some desired functionality, even in adversarial environments. As an example, the most basic question in cryptography is that of secure communication across an insecure channel: Can Alice send a message to Bob so that Bob understands the message, but no eavesdropper does? In addition, how can Bob be sure that the message he received was sent by Alice? Another more recent and as important a question is that of secure computation in an insecure environment: Can a group of parties perform some distributed computation (e.g., carry out an auction, tally a vote, or coordinate an attack), so that an adversary controlling the communication channels and some of the parties cannot disrupt the computation or learn extra information?

While cryptography is an ancient field, the emergence of *modern cryptography* in the last few decades is characterized by several important features distinguishing it from classical cryptography. For one thing, the availability of computers and the wide spread of networked information systems and the Web, has dramatically increased both the need for sound cryptography, and the possibilities that it can offer. In addition to the classical military and national security applications, a wide scope of financial, legal, and social cryptographic applications has emerged, from securing online payments or sending an end-to-end encrypted email, to more ambitious goals of electronic commerce, electronic voting, contract-signing, database privacy, cryptocurrencies, and so on. The most important characteristic of modern cryptography is its *rigorous, scientific approach*, based on firm *complexity-theoretic foundations*. In contrast to the classical approach based on *ad-hoc* solutions (design a scheme that *seems* very hard to break, and hope for the best), modern cryptography aims for specific, rigorously quantifiable security guarantees, based on precise mathematical definitions, *reductions*, and provably secure protocols.

Prerequisites: STAT 211 and CSCE 411.

**Learning Outcomes**

Upon completion of this course, students will be able to:

- Identify, conceptualize and formalize cryptographic goals (e.g., what does it mean for communication to be secure?)
- Describe and analyze common cryptographic tools (protocols and schemes) used in practice, and assess them according to established definitions.
- Understand the limits of what is possible to achieve, in particular becoming conversant with computational assumptions and their implications to cryptography.

The material covered in the class will give the student a firm working knowledge of the basics, and as well as prepare him/her to take an advanced class in cryptography, if so desired. In particular, opportunities for research under my supervision may be available for interested students who do well in the class.
Instructor Information

Name: Juan A. Garay
Telephone number: TBA
Email address: garay@cse.tamu.edu
Office hours: TBA
Office location: HRBB 427C

Textbook and/or Resource Material


Additional papers and handouts will be distributed in class. Lecture material (slides) will be available from the course webpage.

Evaluation Metrics

Grading will be based on three (or more) homeworks (20% each), a final exam (30%) and class participation (10%). Late submission of homeworks will incur a 10% penalty.

Grading scale: A = 90-100%, B = 80-90%, C = 70-80%, D = 60-70%, F = < 60%.

Attendance and Make-up Policies

Attendance
All absences will be handled according to Texas A&M student rule 7 http://student-rules.tamu.edu/rule07. It is your responsibility to keep up with the class, even when unexpected events interfere.

Missed Exams
Missed exams will only be rescheduled for university excused absences. Note that if advanced notice is not feasible, you have 2 business days to provide notification. A zero will be assigned for exams due to an unexcused absence. Documentation must be submitted prior to making up a missed exam or quiz.

Late Work Policy
Late homework assignments will be accepted up to 4 days late with a 10% penalty. No penalty for excused absences turned in up to four days after return to class. Please discuss unusual circumstances in advance with the instructor.

The final exam is scheduled according to University Final Examination policy.

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>Week 1</td>
<td>Introduction. Information-theoretic encryption</td>
<td>Perfectly secure encryption, one-time pad, Shannon’s impossibility result</td>
</tr>
<tr>
<td>Week 2</td>
<td>Basic cryptographic notions</td>
<td>Pseudorandom generators, functions and permutations</td>
</tr>
<tr>
<td>Week 3</td>
<td>Basic cryptographic notions (2)</td>
<td>One-way functions and permutations, hard-core predicates. HW1 assigned</td>
</tr>
<tr>
<td>Week 4</td>
<td>Number theory and computational hardness</td>
<td>Factoring, discrete-log problem, Diffie-Hellman</td>
</tr>
<tr>
<td>Week</td>
<td>Topic</td>
<td>Required Reading</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5</td>
<td>Week 5: Symmetric-key encryption</td>
<td>Definitions of security and constructions, block ciphers. HW1 due</td>
</tr>
<tr>
<td>6</td>
<td>Week 6: Symmetric-key encryption (2)</td>
<td>Modes of operation, AES, stream ciphers, (some) cryptanalysis.</td>
</tr>
<tr>
<td>7</td>
<td>Week 7: Authentication</td>
<td>Message authentication codes, hash functions, SHA-256</td>
</tr>
<tr>
<td>8</td>
<td>Week 8: Key exchange</td>
<td>Trapdoor functions and permutations, commonly used protocols (e.g., Diffie-Hellman). HW2 assigned</td>
</tr>
<tr>
<td>9</td>
<td>Week 9: Public-key encryption</td>
<td>Definitions of security and constructions. HW2 due</td>
</tr>
<tr>
<td>10</td>
<td>Week 10: Public-key encryption (2)</td>
<td>Commonly used schemes (e.g., RSA, ElGamal)</td>
</tr>
<tr>
<td>11</td>
<td>Week 11: Authentication (2)</td>
<td>Digital signatures, RSA, DSA, ECDSA</td>
</tr>
<tr>
<td>12</td>
<td>Week 12: Zero-knowledge proofs</td>
<td>Basic constructions, identification schemes, Fiat-Shamir transform. HW3 assigned</td>
</tr>
<tr>
<td>13</td>
<td>Week 13: Advanced topics</td>
<td>Secret sharing, oblivious transfer. HW3 due</td>
</tr>
<tr>
<td>14</td>
<td>Week 14: Advanced topics (2)</td>
<td>Secure multi-party computation. Post-quantum cryptography, lattice-based cryptosystems</td>
</tr>
<tr>
<td>15</td>
<td>Week 15: Final Exam</td>
<td></td>
</tr>
</tbody>
</table>

**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

New Course Proposal

Date Submitted: 02/26/19 7:59 am
Viewing: MGMT 682 : Seminar in Strategic Entrepreneurship
Last edit: 04/09/19 8:11 am
Changes proposed by: k-mora

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kristi Mora</td>
<td><a href="mailto:k-mora@tamu.edu">k-mora@tamu.edu</a></td>
<td>979-845-6127</td>
</tr>
</tbody>
</table>

Course prefix MGMT
Course number 682
Department Management
College/School Mays Business School
Academic Level Graduate
Effective term 2020-2021

Complete Course Title
Seminar in Strategic Entrepreneurship

Abbreviated Course Title SEMINAR IN ENTREPRENEURSHIP

Catalog course description
Survey of the field of entrepreneurship, building from its theoretical foundations and extending into a variety of topic areas of great interest in contemporary research including entrepreneurial activity in both new and established organizations; emphasis on understanding key literature streams in entrepreneurship, synthesizing research in this area and understanding how to design and write compelling research; skill development to both appreciate and construct empirical research designs.

Prerequisites and Restrictions
Doctoral classification.

Should catalog prerequisites / concurrent enrollment be enforced? No

Crosslistings No Crosslisted With

Stacked No Stacked with

In Workflow
1. MGMT Department Head
2. Curricular Services Review
3. BA Committee Preparer GR
4. BA Committee Chair GR
5. BA 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. 02/19/19 5:04 pm Wendy Boswell (wboswell): Approved for MGMT Department Head
2. 02/21/19 11:27 am Terra Bissett (t.bissett): Rollback to Initiator
3. 03/01/19 9:00 am Wendy Boswell (wboswell): Approved for MGMT Department Head
4. 03/01/19 9:34 am Terra Bissett (t.bissett): Approved for Curricular Services Review

https://nextcatalog.tamu.edu/courseleaf/approve/?role=Faculty Senate
<table>
<thead>
<tr>
<th>Semester</th>
<th>Credit</th>
<th>Contact Hour(s) (per week):</th>
<th>Lecture</th>
<th>Lab</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3</td>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Repeatable for credit? No

CIP/Fund Code 5207010016

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) No

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

<table>
<thead>
<tr>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(PHD-MGMT) Doctor of Philosophy in Management</td>
</tr>
</tbody>
</table>

**Course Syllabus**

Upload syllabus

Upload syllabus **MGMT 682 Seminar in Entrepreneurship Syllabus.pdf**
| Letters of support or other documentation | No |

| Additional information |  |

<table>
<thead>
<tr>
<th>Reviewer</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Terra Bissett (t.bissett) (03/01/19 9:34 am):</td>
<td>Updates received.</td>
</tr>
<tr>
<td>Harry Hogan (h-hogan) (03/26/19 10:03 pm):</td>
<td>Engineering requests modifying the title of this course to indicate that it is for management students and/or from a management perspective, as we have done for many of our engineering entrepreneurship courses.</td>
</tr>
<tr>
<td>LaRhesa Johnson (lrjohnson) (04/09/19 8:11 am):</td>
<td>Updated course name per department</td>
</tr>
</tbody>
</table>

Key: 19045
MGMT 682
Seminar in Entrepreneurship
Spring 2019

Professor            Michael Howard, Ph.D.            Section 600
Office                Wehner 420L              Day M
Email                  mhoward@mays.tamu.edu
Office Hours       Tues 9-Noon, or by appt.        Time 1:00-4:00
                    WCBA 415G

Prerequisite: Doctoral classification.

Catalog Course Description
Survey of the field of entrepreneurship, building from its theoretical foundations and extending into a variety of topic areas of great interest in contemporary research including entrepreneurial activity in both new and established organizations; emphasis on understanding key literature streams in entrepreneurship, synthesizing research in this area, and understanding how to design and write compelling research; skill development to both appreciate and construct empirical research designs.

Course Overview
This course offers a broad survey of the field of entrepreneurship, building from its theoretical foundations and extending into a variety of topic areas of great interest in contemporary research. Entrepreneurship occurs in different settings – traditional start-ups pursuing new market opportunities, skilled scientists seeking to commercialize new technologies, established firms that leverage their resources and human capital to explore new products and businesses, and many others. At the same time, entrepreneurship is a multi-level phenomenon, encompassing factors such as individual differences and characteristics of entrepreneurs, founding team dynamics, organizational strategy, and market competition.

The emphasis of the seminar is on understanding key literature streams in entrepreneurship, synthesizing research in this area, and understanding how to design and write compelling research. We will
also develop skills to both appreciate and construct empirical research designs.

Course Requirements:
The essence of this seminar will be the quality of the interaction during the class sessions.

Because this course is a seminar, most of the action takes place during class discussion. Thus, all participants should show up prepared to discuss the readings. Please refer to Student Rule 7 for the University policy on excused absences: [https://student-rules.tamu.edu/rule07/](https://student-rules.tamu.edu/rule07/).

As you do the readings, consider not only what the author did wrong - the usual stock in trade of graduate seminars - but also what he/she did right. What are the interesting ideas in the paper? If you disagree with an argument, what would it take to convince you? What are the scope conditions - under what circumstances is the argument meant to apply (e.g., only to U.S. tech start-ups; only to family businesses in Canada, etc.)? Are there critical differences between this author's arguments and those of others we have read? Can these differences be resolved through empirical test? What would such a study look like?

Criteria for student evaluation:

- **(25%)** Weekly contributions to the class discussion, including an oral critique and 1 page written summary of a reading assigned to you to review.

- **(25%)** A student will be randomly selected to begin the discussion of each reading by offering a 5 minute overview of what was interesting about the article - not a recap or summary of the major parts of the article but an informed, insightful, elucidation of the major themes the author was attempting to develop. In order to prepare properly, it is expected that each student should have already individually prepared 1-2 pages of their own notes on each article. Give us your quick perspective on some of the following:
  - What is the research question or theoretical perspective the author is investigating?
  - What is similar and different about this study as compared to other readings for the same week?
  - What are the interesting ideas in the paper?
  - What are some of the areas that could have been strengthened?
(20%) Select students will serve as a discussion leader for a session. The discussion leader’s role will include the following: (See also "Guidelines for Assessing Perspectives" below).

- Provide introductory remarks at the beginning of the session, providing an overview of the topic, without discussing the individual readings in detail.
- Manage the discussion during the session.
- At the end of the session take 10-15 minutes to summarize the session, provide insights into the 3-5 most interesting patterns of findings that have been encountered by researchers, and proposing ways in which the readings either reinforce or contradict each other.
- Create a one-two page summary of the key research questions, dependent and independent variables (if applicable), central findings, important conclusions and deficiencies/limitations.

(30%) Research proposal:
The research proposal is intended to get you thinking concretely about designing research that advances the discourse on a particular area (and, not incidentally, to give you practice in thinking through a dissertation question and writing a dissertation proposal). Proposals are to resemble the front end of an empirical paper, with theoretical development, hypotheses, and a sketch of a methods section. It is useful to start thinking about and talking to me about this early.

This assignment will be due in two stages: In week 8 you will turn in a 3 page, single-spaced ‘Idea’ paper, which should include (1) a brief summary of what has been done in the area, (2) what specific things you would do that would be different (i.e., what will be the value-added of this over other studies), (3) an illustration of your causal relationships (boxes and arrows) and (4) hypotheses or propositions. We will begin discussing these informally in week 9. Final papers will be due last day of class. They should include more detail and outline how the variables will be operationalized (including, to the extent possible, data sources).

Grading Scale: > 90 = A, 80-89 = B, 70-79 = C, 60-69 = D, < 60 = F

Guidelines for Assessing Perspectives
(For session leaders)

At the beginning of class:
- Describe the central research problem or question
- State the central theory or framework that is proposed.
- Define key concepts (constructs or variables).
- How are these concepts related or compared in the framework or theory?
At the end of class:

1. Create a grid that can be handed out at the end of class. For each paper or study we have discussed please put together a spreadsheet listing the studies and some comments along the following dimensions:
   - Research question
   - Central theme or main argument of the study
   - IVs and DVs
   - Central finding, key takeaway, important conclusions, or what’s interesting
   - Limitations or what’s missing

2. Summarize the empirical evidence for and against the theory/framework.
   - State the key assumptions, propositions, and conclusions.
   - Summarize the major conclusions drawn from the research.
   - How would the theory/framework be falsified?

3. Constructively assess the perspective:
   - Identify the strengths/weaknesses of its logical structure and research methods.
   - How would you correct these weaknesses and build on these strengths?
   - Suggest ways to relate this perspective to others we have discussed in the course.

Aggie Honor System

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Aggie Honor Code, to accept responsibility for learning and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not exclude any member of the Texas A&M community from the requirements or the processes of the Honor system. The Aggie Honor Code:

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

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

The TAMU Honor System sets forth the following definitions of academic misconduct:
1. **Cheating**: Intentionally using or attempting to use unauthorized materials, information, notes, study aids, or other devices or materials in any academic exercise.

2. **Fabrication**: Making up data or results, and recording or reporting them; submitting fabricated documents.

3. **Falsification**: Manipulating research materials, equipment or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

4. **Multiple submissions**: Submitting substantial portions of the same work (including oral reports) for credit more than once without authorization from the instructor of the class for which the student submits the work.

5. **Plagiarism**: The appropriation of another person’s ideas, processes, results, or words without giving proper credit.

6. **Complicity**: Intentionally or knowingly helping, or attempting to help, another to commit an act of academic dishonesty.

7. And others

**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/](http://disability.tamu.edu/).

**Spring 2019 Course Schedule**

**Week 1. (Jan 14) Course introduction**

**Leader: Mike Howard**


***January 21 - Dr. Martin Luther King, Jr. Day – No Class***

**Week 2. (Jan 28) Foundations of Entrepreneurship**

**Leader: _______________**


**Week 3. (Feb 4) Strategic Entrepreneurship**

**Leader: ______________**


**Week 4. (Feb 11) The Venture Creation Process**

**Leader: ______________**


Week 5. (Feb 18) Entrepreneurs are Just Different?

Leader: _______________


Week 6. (Feb 25) Founding Teams
Leader: 


Week 7. (Mar 4) Entrepreneurship as Creation or Discovery?

Leader: 


***March 11-15 Spring Break***

**Week 8. (Mar 18) Bricolage and Resource Assembly**

**Leader:** ______________


**Week 9. (Mar 25) Technological Innovation**

**Leader:** ______________


**Week 10. (Apr 1) Dependence – Resource, Knowledge, Path, oh my!**

**Leader:**


**Week 11. (Apr 8) Corporate Venturing**

**Leader: __________________**


**Week 12. (Apr 15) Spinoffs and Spawning**

**Leader: __________________**


**Week 13. (Apr 22) Regions and Ecosystems in New Venture Creation**

**Leader: **


**Week 14 (Apr 29) Course wrap-up and reflection**

**Leader: Mike Howard**

What is theory?:


Two papers chosen by me (announced week 13).
Course Change Request

New Course Proposal

Date Submitted: 02/26/19 7:59 am

Viewing: MGMT 683 : Seminar in Organizational and Strategic Leadership

Last edit: 04/09/19 8:12 am
Changes proposed by: k-mora

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kristi Mora</td>
<td><a href="mailto:k-mora@tamu.edu">k-mora@tamu.edu</a></td>
<td>979-845-6127</td>
</tr>
</tbody>
</table>

Course prefix: MGMT  
Course number: 683

Department: Management
College/School: Mays Business School
Academic Level: Graduate
Effective term: 2020-2021

Complete Course Title
Seminar in Organizational and Strategic Leadership

Abbreviated Course Title
SEMINAR IN LEADERSHIP

Catalog course description
Intensive overview of scholarly research on selected topics within the general area of leadership; review of key concepts, theories, and research findings on leadership in organizations; micro and macro perspectives of leadership are considered; emphasis on understanding theoretical issues and research methods related to leadership research and discovering ways to expand knowledge on this topic through scholarly research.

Prerequisites and Restrictions
Doctoral classification.

Should catalog prerequisites / concurrent enrollment be enforced?
No

Crosslistings
No

Stacked
No

Approval Path
1. 02/19/19 5:04 pm MGMT Department Head
Wendy Boswell (wboswell): Approved for MGMT Department Head
2. 02/21/19 11:28 am Curricular Services Review
Terra Bissett (t.bissett): Rollback to Initiator
3. 03/01/19 9:00 am BA Committee Chair GR
Wendy Boswell (wboswell): Approved for MGMT Department Head
4. 03/01/19 9:37 am BA College Dean GR
Terra Bissett (t.bissett): Approved for Curricular Services Review
<table>
<thead>
<tr>
<th>Semester</th>
<th>Contact Hour(s) (per week):</th>
<th>Lecture:</th>
<th>Lab:</th>
<th>Other:</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Repeatable for credit?</th>
<th>CIP/Fund Code</th>
<th>Default Grade Mode</th>
<th>Method of instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>S210030016</td>
<td>Letter Grade (G)</td>
<td>Lecture</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Will this course be taught at another branch?</th>
<th>Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Will this course be taught as a distance education course?</th>
<th>Is 100% of this course going to be taught in Texas?</th>
<th>Will classroom space be needed for this course?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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

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

```markdown
<table>
<thead>
<tr>
<th>Program(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(PHD-MGMT) Doctor of Philosophy in Management</td>
</tr>
</tbody>
</table>
```

---

**Course Syllabus**

Syllabus: [Upload syllabus](https://nextcatalog.tamu.edu/courseleaf/approve/?role=Faculty Senate)
<table>
<thead>
<tr>
<th>Upload syllabus</th>
<th>MGMT 683 Seminar in Leadership Syllabus.pdf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letters of support or other documentation</td>
<td>No</td>
</tr>
<tr>
<td>Additional information</td>
<td></td>
</tr>
<tr>
<td>Reviewer Comments</td>
<td>Terra Bissett (t.bissett) (02/21/19 11:28 am): Rollback: Syllabus: If more than 10% of grade is based on participation, syllabus should explicitly define and outline how grade is determined; please include unaltered, standard ADA statement. Terra Bissett (t.bissett) (03/01/19 9:36 am): Updates received. Harry Hogan (h-hogan) (03/26/19 10:02 pm): Engineering requests modifying the title of this course to indicate that it is for management students and/or from a management perspective, as we have done for many of our engineering leadership courses. LaRhesa Johnson (lrjohnson) (04/09/19 8:12 am): Updated course name per department</td>
</tr>
</tbody>
</table>

Key: 19046
MGMT 683 – SEMINAR IN LEADERSHIP
SPRING 2019

CLASS TIMES AND LOCATION
Tuesday 2:00p-
5:00p Wehner 415G

INSTRUCTOR:
Stephen H. Courtright, Ph.D.
Email: scourtright@mays.tamu.edu
Phone: (979) 862-3953

OFFICE HOURS:
By appointment
Office: Wehner 483E

REQUIRED MATERIALS:
No required textbook. Readings are taken from a variety of academic journals that are accessible through TAMU Libraries.

CATALOG COURSE DESCRIPTION

Intensive overview of scholarly research on selected topics within the general area of leadership; review of key concepts, theories, and research findings on leadership in organizations; micro and macro perspectives of leadership are considered; emphasis on understanding theoretical issues and research methods related to leadership research and discovering ways to expand knowledge on this topic through scholarly research. Prerequisite: Doctoral classification.

COURSE OVERVIEW AND OBJECTIVES

This course is designed to provide students with an intensive overview of scholarly research on selected topics within the general area of leadership. In this course, we will review key concepts, theories, and research findings on leadership in organizations. In addition, our review of the research will consider both micro and macro perspectives of leadership as this is an inherently multilevel topic. As such, a goal of this course is to help students from macro and micro backgrounds gain a more integrated, multilevel, comprehensive view of the field of leadership and provide a backdrop for conducting scholarly work on the topic.

Please note that while we will undoubtedly discuss practical implications of the theories and research findings discussed in class, as a doctoral seminar, this is not a “how to” course on leadership. Rather, our emphasis will be on understanding theoretical issues and research methods related to leadership research, and to discover ways to expand knowledge on this topic through scholarly research. In that sense, the overarching objective of the course is to help students become effective consumers of and contributors to organizational leadership research.
In that vein, the specific objectives of the course are as follows:

- Understand fundamental theories and principles related to organizational leadership processes
- Evaluate the strengths and weaknesses of research on the topic of leadership, including underlying theory and research methodologies
- Critically assess leadership research at multiple levels of analysis and understand how to effectively communicate these criticisms to scholars
- Improve research idea generation, theory building, hypothesis development, and methodological understanding

**GENERAL EXPECTATIONS**

The success of this class depends on your active involvement in the learning process. The following represent my general expectations for your involvement in the learning process. I refer to these expectations as the “3 Ps”:

1. **Preparation.** I expect that you will complete the assigned readings **before each class** so that you will be prepared to participate in class discussions. In turn, you can expect me to carefully prepare for each class and likewise participate in class discussions without dominating them.

2. **Principle.** Cheating, particularly plagiarism, reflects a lack of self-confidence and self-control. Although more information on the ethics guidelines for this course is given below, suffice it to say here that I expect each student to uphold and defend the highest ethical standards in this class. In turn, you can expect me to always treat you with fairness and respect.

3. **Participation.** Your participation in class discussions and group projects is essential to your development as a scholar and to the success of the class as a whole. While more specifics about class participation are given below, let me mention one expectation related to class participation right now: **use of laptops and other electronic devices is prohibited during class.** In turn, you can expect me to promote an environment that is safe, energizing and intellectually stimulating.

**COURSE ACTIVITIES AND GRADING GUIDELINES**

Your course grade will be based on the following:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation and Engagement</td>
<td>25%</td>
</tr>
<tr>
<td>Research Idea Briefs (15% each)</td>
<td>30%</td>
</tr>
<tr>
<td>Article Review</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
</tr>
</tbody>
</table>

**Participation and Engagement**

Your attendance, participation, and engagement in class discussions are essential to the success of the class because we will learn from each other. Accordingly, 25% of your total grade will be based on participation and engagement. You should come to class each week prepared to (a) discuss what we can learn from the assigned articles, (b) critically evaluate each article, and (c) identify critical gaps that require future research.
Your participation grade, which accounts for 25% of your total grade, is determined by the quantity as well as the quality of one's comments during seminar discussions. In terms of quantity, you are expected to participate in discussions, which can include voicing critiques about the research articles being discussed as well as research ideas that could come from the topics being discussed. In terms of quality, you are expected to give comments that are substantive around key issues with the research articles being discussed, as well as creative ideas for future research and how to move the literature forward.

**Research Briefs**
During the semester, you will write two Research Briefs. Each of these papers will be no longer than five double-spaced pages (i.e., the length of an AOM symposium write-up or SMS abstract proposal). In each paper, you will identify a research question, describe the key theoretical underpinnings, develop testable hypotheses, and outline a design to test the hypotheses. You will also highlight the potential contributions of the paper to the literature. Each Research Brief will count toward 15% of your total grade.

**Final Exam**
There will be a final exam at the end of the semester. The format of the questions will be similar to comprehensive exam questions and will include material covered throughout the course. The final exam will count as 30% of your final grade.

**Article Review**
Reviewing papers is a critical aspect of a scholarly career, and a service that scholars provide to the field. To help you develop skills in this area, you will be given an opportunity to review an in-progress empirical paper and provide a scholarly review following the Academy of Management Journal’s review guidelines ([http://aom.org/Publications/AMJ/AMJ-Reviewer-Resources.aspx](http://aom.org/Publications/AMJ/AMJ-Reviewer-Resources.aspx)). The review will count as 15% of your final grade.

**Final Grade Evaluations**
Your final grade will be based on the following scale:

<table>
<thead>
<tr>
<th>Points</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100%</td>
<td>A</td>
</tr>
<tr>
<td>80-89.9%</td>
<td>B</td>
</tr>
<tr>
<td>70-79.9%</td>
<td>C</td>
</tr>
<tr>
<td>60-69.9%</td>
<td>D</td>
</tr>
<tr>
<td>0-59.9%</td>
<td>F</td>
</tr>
</tbody>
</table>

**Electronic Communications**
I will frequently send announcements and reminders via e-mail. I will use your Texas A&M e-mail addresses for these communications.

**Attendance Policy**
You are expected to attend each class. That said, there may be times when an absence from class is justified. Such instances include the following:
1) Participation in a class-required activity that appears on the university authorized activity list.
2) Death or major illness in your immediate family.
3) Illness of a dependent family member (e.g., child, spouse).
4) Participation in legal proceedings or administrative procedures that require your presence.
5) Religious holy day.
6) Illness that is too severe or contagious to attend class.
7) Required participation in military duties.
8) Other absences may be excused at my discretion with prior notification.

With the exception of a religious holy day, you must notify me by e-mail before the start of class that you will be absent. In cases where advance notification is not feasible (e.g., accident or emergency), please notify me regarding the reason behind your absence within three days of the incident.

**Policy on Late Work**

Due dates for assignments are noted in the course schedule and are turned in on the day of class noted in the course schedule. They must be turned in by the beginning of class or else they are considered late and will result in an automatic loss of all points on the assignment. Thus, it is essential that you plan ahead to ensure that the assignment is turned in on time. Please note that I do not give “Incomplete” grades on any assignments. Instead, they must be turned in on the day they are due or else they will receive a zero grade.

See Student Rule 7 (https://student-rules.tamu.edu/rule07/) for additional details regarding attendance and graded work.

**Policy on Cheating and Honor Code Violations**

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

Honesty and integrity are absolutely essential in our field. Therefore, I expect each student to uphold and defend the highest ethical standards in this class. Some implications of the high ethical standards for this course are as follows:

First, I expect absolutely no cheating, plagiarism, or falsification of any work you turn in for this class. This includes, but is not limited to, such things as copying sentences from previously published work, turning in someone else’s work, or re-submitting papers and materials used previously for another class.

Second, no student will give or receive unauthorized aid during the final exam. In other words, you must rely solely on your memory during the exam. Any verbal or non-verbal communication with other people or use of resources other than your memory during the exam will be considered cheating and will result in appropriate penalties (see below).

Academic misconduct may result in penalties up to and including suspension or expulsion from school. More specifically, if I determine there has been a breach of ethics on the assignments or exam, the student(s) will automatically receive a zero for the assignment and may receive an “F” in the class.
Furthermore, any incident of cheating will result in an immediate referral to the Aggie Honor System Office. For additional information visit [http://aggiehonor.tamu.edu](http://aggiehonor.tamu.edu).

**Grade Appeals Process and Other Student Concerns**

If you have a concern about a grade that you receive on any assignment in this class, you are invited to submit a written appeal to me within five days of receiving the grade in question. This appeal should outline your specific concerns with the grade and the evidence you have to support why it should be changed. I will consider your written appeal and send you my decision regarding the grade. Other concerns regarding this course should first be discussed with me, the instructor teaching this course. If we are unable to resolve the complaint, you may contact the Department Head of the Department of Management (Dr. Wendy Boswell, 979-862-3962, wboswell@mays.tamu.edu).

**Sexual Harassment Policy**

I am deeply committed to providing students with an environment free from sexual harassment. One newspaper columnist observed that “Today, we expect sexual harassment laws to restrain coarse behavior... But policemen and laws can never replace customs, traditions and moral values as a means for regulating human behavior.” In that vein, my sincere hope is that there will be no incidents of sexual harassment in my course because of a deep, personal commitment to the highest ethical and moral standards. However, if you feel you have been harassed, I strongly encourage you to visit with the Office of the Dean of Student Life (803 West Campus Blvd; 979-845-3111).

**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/](http://disability.tamu.edu/).

**Food and Drink in the Classroom**

We have beautiful, state-of-the-art classrooms in the Wehner Building. We want to maintain the high quality of these classrooms for current and future students. Thus, it is necessary for you to adhere to the established policy of no beverages (except water), food, tobacco products, or like items within the Wehner Building classrooms.
COURSE SCHEDULE AND READINGS (SUBJECT TO CHANGE)

Note. Studies in boldface are assigned readings

WEEK 1 (JAN 23) – INTRODUCTION TO LEADERSHIP


WEEK 2 (JAN 30) – SURFACE-LEVEL TRAITS AND LEADERSHIP

Reviews and meta-analyses:


Recent articles:


McDonald, M., Keeves, G. D., & Westphal, J. (in press). One step forward, one step back: White male top manager organizational identification and helping behavior toward other executives following the appointment of a female or racial minority CEO. *Academy of Management Journal*.


WEEK 3 (FEB 6) – DEEP-LEVEL TRAITS AND LEADERSHIP

Reviews and meta-analyses:


Recent articles:


WEEK 4 (FEB 13) – TRANSFORMATIONAL/CHARISMATIC LEADERSHIP

Reviews and meta-analyses:


Recent articles:


WEEK 5 (FEB 20) – POSITIVE LEADERSHIP

Reviews and meta-analyses:


Recent articles:


Reviews and meta-analyses:


Recent articles:


Foulk, T., Lanaj, K., Tu, M., Erez, A., & Archambeau, L. (in press). Heavy is the head that wears the crown: An actor-centric approach to daily psychological power, abusive leader behavior, and perceived incivility. *Academy of Management Journal*.


17
WEEK 7 (MARCH 6) – EMPOWERING LEADERSHIP

Reviews and meta-analyses:


Recent articles:


18


WEEK 8 (MARCH 20) – LEADER-MEMBER EXCHANGE AND NETWORKS

Reviews and meta-analyses:


Recent articles:


WEEK 9 (MARCH 27) –SHARED LEADERSHIP AND PEER INFLUENCE

Reviews and meta-analyses:


Recent articles:


WEEK 10 (APRIL 3) – LEADER EMERGENCE, SUCCESSION AND TURNOVER (REVIEW DUE)

Reviews and meta-analyses:


Recent articles:


WEEK 11 (APRIL 10) – LEADER DEVELOPMENT

Reviews and meta-analyses:


Recent articles:


WEEK 12 (APRIL 17) – JUSTICE, EMOTIONS, AND LEADERSHIP

Reviews and meta-analyses on emotions and leadership:


Recent articles on emotions and leadership:


Recent articles on justice and leadership:


WEEK 15 (MAY 3) – FINAL EXAM
Course Change Request

New Course Proposal

Date Submitted: 02/26/19 6:10 pm

Viewing: OCNG 680 : Paleoclimate

Last edit: 03/05/19 1:14 pm

Changes proposed by: dthornton

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daniel Thornton</td>
<td><a href="mailto:dthornton@tamu.edu">dthornton@tamu.edu</a></td>
<td>9798454092</td>
</tr>
</tbody>
</table>

Course prefix        OCNG
Course number        680

Department           Oceanography
College/School       Geosciences
Academic Level       Graduate
Academic Level (alternate) Undergraduate
Effective term       2020-2021

Complete Course Title
Paleoclimate
Abbreviated Course Title
PALEOCLIMATE

Catalog course description
Overview of climate change in the geological past; reconstructing past climates; causes of past climates and climate change; climate change in the Cenozoic; extreme climates.

Prerequisites and Restrictions
Approval of instructor.

Concurrent Enrollment
No

Should catalog prerequisites / concurrent enrollment be enforced?
No

Crosslistings
No

Crosslisted With

In Workflow
1. OCNG Department Head
2. Curricular Services Review
3. GE Committee Preparer GR
4. GE Committee Chair GR
5. GE 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. 02/26/19 8:56 pm
   Shari Yvon-Lewis (syvon-lewis): Approved for OCNG Department Head
2. 03/01/19 4:13 pm
   Terra Bissett (t.bissett): Approved for Curricular Services Review
3. 03/06/19 4:22 pm
   Roxanna Russell (rrussell): Approved for GE Committee Preparer GR
4. 03/07/19 5:09 pm
   Christian Brannstrom (cbrannst): Approved for GE
<table>
<thead>
<tr>
<th>Stacked with</th>
<th>No</th>
<th>Contact Hour(s) (per week):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester 3</td>
<td></td>
<td>Lecture: 3</td>
</tr>
<tr>
<td>Credit Hour(s)</td>
<td></td>
<td>Total: 3</td>
</tr>
<tr>
<td>Repeatable for credit?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Three-peat?</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>CIP/Fund Code</td>
<td>4006010002</td>
<td>Default Grade</td>
</tr>
<tr>
<td>Mode</td>
<td>Alternate Grade Modes</td>
<td>Satisfactory/Unsatisfactory</td>
</tr>
<tr>
<td>Method of instruction</td>
<td>Lecture</td>
<td>Will this course be taught at another branch?</td>
</tr>
<tr>
<td>Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education)</td>
<td>No</td>
<td>Will this course be taught as a distance education course?</td>
</tr>
<tr>
<td>Is 100% of this course going to be taught in Texas?</td>
<td>Yes</td>
<td>Will classroom space be needed for this course?</td>
</tr>
</tbody>
</table>

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>(MS-OCNG) Master of Science in Oceanography</td>
</tr>
<tr>
<td>Program(s)</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>(PHD-OCNG) Doctor of Philosophy in Oceanography</td>
</tr>
</tbody>
</table>

## Course Syllabus

<table>
<thead>
<tr>
<th>Syllabus:</th>
<th>Upload syllabus</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Syllabus_Paleoclimate_OCNG680_fall2020.pdf</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Letters of support or other documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taught once as an OCNG 689, will be taught again as an OCNG 689 in Fall 2019. Communicated with faculty in other Departments in the College of Geosciences to ensure that this does course does not overlap significantly with courses offered in either Geography, or Geology and Geophysics.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reviewer Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add</td>
</tr>
<tr>
<td>CS</td>
</tr>
</tbody>
</table>

Key: 19055
Course title and number: OCNG 680 Paleoclimate

Term: Fall 2020

Meeting times and location: T Th 15:55-17:10 O&M Building 617

Course Description and Prerequisites

This class will explore the character and causes of past climates and climate change. Each week we will focus on a new time interval and/or methodology in reconstructing climate or aspects of the climate system. Students are required to read a minimum of 2 to 3 scientific papers in order to participate in active discussions during class.

Some lectures will be given by the instructor, but for the most part, topics will be reviewed and summarized in detail by students. The students responsible for the topic will read additional articles and materials to prepare as “expert” on the subject matter. “Experts” will be responsible for a presentation on the topic during the day of discussion, as well as a written summary review (half to one page) and at least 5 questions that will help guide others through the assigned material. The summary and questions will be provided to the rest of the class one week before their topic is discussed.

Prerequisites: Approval of the instructor. General background in geology, geochemistry and oceanography is necessary.

Learning Outcomes or Course Objectives

Students completing this course will be able to

- Identify the major driving forces of global climate change;
- Describe the strengths and weaknesses of the common approaches to reconstruct Earth’s past climates and climate forcings;
- Understand the facts and potential causes of extreme climates (snowball Earth, Mesozoic greenhouse, Pleistocene icehouse etc);
- Understand the facts and potential causes of major climate change events in the Earth’s most recent era of the Cenozoic;
- Apply the knowledge and principles of paleoclimate change to predict our future climates.

Instructor Information

Name: Dr. Yige Zhang
Telephone number: 979-845-4978
Email address: yige.zhang@tamu.edu
Office hours: By Appointment (the best way to reach me is by email)
Office location: O&M 517

Textbook and/or Resource Material

Paleoclimate: Michael Bender, Princeton University Press

Grading Policies

Grades will be assigned based on the students’ handling of their assigned topics (review/summary
provided, 20%; class presentation and discussions facilitated, 40%), participation in class discussions (10%), and a term project (30%). The review and summary is graded based on the timeliness (provided one week before the discussion, 5%), accuracy of the summary (7.5%) and the questions that they provided to simulate critical thinking and discussions (7.5%). The presentation and discussions is graded based on the students’ understanding of the topic (20%) and their engagement of the audience (20%). The term project asks students to tackle an outstanding paleoclimate problem using data and records provided by published literature. A list of topics will be provided and each student will pick only one topic to study.

A (90-100%), B (80-89%), C (70-79%), D (60-69%), F (<60%).

Attendance and Make-up Policy

Attendance is strongly encouraged. 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 and unexcused absences are located on-line at http://student-rules.tamu.edu/rule07. In-class presentations and discussions constitute a large portion of the final grade. The material from the class is updated frequently therefore cannot always been found in textbooks.

Course Topic, Calendar of Activities, Major Assignment Dates

Course schedule is tentative and subject to change.

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday Dates</th>
<th>Topic</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Aug 26 (Add/Drop: Aug 30 5 pm)</td>
<td>Climate system</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Sept 2</td>
<td>Temperature proxies</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sept 9</td>
<td>O$_2$ and CO$_2$ proxies</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Sept 16</td>
<td>Faint Young Sun and Snowball Earth</td>
<td>Student-lead Discussions Begin</td>
</tr>
<tr>
<td>5</td>
<td>Sept 23</td>
<td>Cretaceous Greenhouse and Glaciations</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Sept 30</td>
<td>Early Eocene Climatic Optimum and Hypterthermals</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Oct 7</td>
<td>Eocene – Oligocene Climate Transition</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Oct 14</td>
<td>Early Miocene to Middle Miocene Climates</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Oct 21</td>
<td>Late Miocene Cooling and C4 Expansion</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Oct 28</td>
<td>Warm Pliocene</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Nov 4</td>
<td>Northern Hemisphere Glaciation</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Nov 11</td>
<td>Pleistocene Glacial Cycles</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Nov 18</td>
<td>Holocene Climate, Climate and Cultures</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Nov 25</td>
<td>Future Climate Projections</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Dec 2</td>
<td>Term Project Due: Dec 5 by 5</td>
<td></td>
</tr>
</tbody>
</table>
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.”