Course Change Request

Date Submitted: 02/01/18 2:34 pm

Viewing: CSCE 222 : Discrete Structures for Computing
Also Known As: ECEN 222
Last edit: 03/09/18 9:06 am
Changes proposed by: smilingsheila

Catalog Pages referencing this course:
- CSCE - Computer Sci & Engr (CSCE)
- Department of Computer Science & Engineering
- Department of Electrical & Computer Engineering
- Department of Mathematics
- ECEN - Electrical & Comp Engr (ECEN)
- MATH - Mathematics (MATH)
- BS-MATH: Mathematics - BS

Faculty Senate Number

Contact(s)

<table>
<thead>
<tr>
<th>Name</th>
<th>E-mail</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheila Dotson</td>
<td><a href="mailto:dotson@tamu.edu">dotson@tamu.edu</a></td>
<td>979-845-6176</td>
</tr>
</tbody>
</table>

Rationale for Course

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

Course prefix: CSCE  
Course number: 222  
Department: Computer Science & Engineering  
College/School: College of Engineering  
Academic Level: Undergraduate  
Undergraduate course level justification (Select One)

Academic Level: Graduate  
Effective term: 2018-2019  
Complete Course Title: Discrete Structures for Computing  
Abbreviated Course Title: DISCRETE STRUC COMPUTING

Catalog course description:
Provide mathematical foundations from discrete mathematics for analyzing computer algorithms, for both correctness and performance; introduction to models of computation, including finite state machines and Turing machines.

Prerequisites and Restrictions:
MATH 151.

Concurrent Enrollment:
No

Should catalog prerequisites / concurrent enrollment be enforced?
Yes

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

Approval Path
1. 02/01/18 2:53 pm  
   Scott Schaefer  
   (schaef): Approved for CSCE Department Head
2. 02/06/18 11:33 am  
   Miroslav Begovic  
   (begovic): Approved for ECEN Department Head
3. 02/07/18 10:33 am  
   Sandra Williams  
   (sandra-williams): Approved for Curricular Services Review
4. 03/06/18 3:58 pm  
   Eileen Hoy (ehoy): Approved for EN Committee Preparer UG
5. 03/08/18 1:55 pm  
   Prasad Enjeti (enjeti): Approved for EN Committee Chair UG
6. 03/08/18 1:57 pm  
   Prasad Enjeti (enjeti): Approved for EN College Dean UG
7. 03/08/18 3:16 pm  
   Sandra Williams  
   (sandra-williams): Approved for UCC Preparer
8. 03/09/18 3:31 pm  
   Sandra Williams  
   (sandra-williams): Approved for UCC Chair
### 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></th>
<th></th>
<th>Concurrency?</th>
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</thead>
<tbody>
<tr>
<td>Or</td>
<td>MATH 151</td>
<td>D</td>
<td>UG</td>
<td></td>
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<td>Or</td>
<td>MATH 171</td>
<td>D</td>
<td>UG</td>
<td></td>
<td></td>
<td>No</td>
</tr>
</tbody>
</table>

Crosslistings: Yes
Crosslisted With: ECEN 222

<table>
<thead>
<tr>
<th>Semester 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></td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Repeatable for credit: No
Three-peat: No
CIP/Fund Code: 1107010006
Default Grade Mode: Letter Grade (G)
Alternate Grade Modes: Satisfactory/Unsatisfactory
Method of instruction: Lecture
Will sections of this course be taught as non-traditional? (i.e., parts of term, distance education) Yes

### Learning Outcomes

- Meets traditional face-to-face learning outcomes.

Describe how learning outcomes are met or provide justification why they are not met.
- Meets the same learning outcomes as traditional face-to-face sections.

### Hours

- Meets traditional face-to-face hours.

Describe how hours are met or provide justification why they are not met.
- Meets the same number of hours as traditional face-to-face sections

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)
Course Syllabus

Syllabus: Upload syllabus
Upload syllabus
222 Fall 18.doc
222 Summer.doc

Letters of support or other documentation
No

Additional information
Summer 2018 offering web course

Reviewer Comments
Sandra Williams (sandra-williams) (03/09/18 9:06 am): Syllabus received.
Sandra Williams (sandra-williams) (03/09/18 3:31 pm): UCC approved March 9 via e-vote.

Reported to state?
No
Course title and number: CSCE 222
Term (e.g., Fall 200X): Fall 2018
Meeting times and location: TBD

Course Description and Prerequisites
This course provides the mathematical foundations from discrete mathematics for analyzing computer algorithms, for both correctness and performance; introduction to models of computation, including finite state machines and Turing machines. Prerequisite: MATH 151.

Learning Outcomes or Course Objectives
At the end of the course, students will understand the basic principles of logic, proofs and sets. They will be able to apply results from discrete mathematics to the analysis of algorithms. They will be able to produce proofs by induction and apply counting techniques. They will have a basic understanding of models of computation.

Instructor Information
Name: Dr. Hyunyoung Lee
Telephone number: 979-845-2490
Email address: hlee@cse.tamu.edu
Office hours: Wed. 2-3pm and Thur. 2:30-3:20pm
Office location: HRBB 410B

Textbook and/or Resource Material
Course homepage: http://faculty.cse.tamu.edu/hlee/csce222

Grading Policies
Make-up exams and quizzes will only be given with documented University-approved excuses, see Student Rules regarding Academics at http://student-rules.tamu.edu.

Your grade will be based on the following components:
- Exams 60%
- Quizzes and Exercises 10% - the lowest grade will be dropped
- Homework 30%

Any make-up work must be completed before the solutions are posted or the graded results become available to the students, whichever occurs first.

Grading Scale

Standard Letter Grading Scale:
A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = <60
Course Topics, Calendar of Activities, Major Assignment Dates

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<td>5</td>
<td>Exam 1; Algorithms and Their Complexity</td>
<td>Chapter 3</td>
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<tr>
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<td>Sequences and Sums</td>
<td>Chapter 2</td>
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<tr>
<td>7</td>
<td>Induction and Recursion</td>
<td>Chapter 5</td>
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<td>Chapter 5, 6</td>
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<tr>
<td>9</td>
<td>Counting; Solving Recurrences</td>
<td>Chapter 6, 8</td>
</tr>
<tr>
<td>10</td>
<td>Solving Recurrences; Exam 2</td>
<td>Chapter 8</td>
</tr>
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<td>11</td>
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<tr>
<td>12</td>
<td>Relations</td>
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<td>13</td>
<td>Models of Computation</td>
<td>Chapter 13</td>
</tr>
<tr>
<td>14</td>
<td>Models of Computation; Review</td>
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<tr>
<td>15</td>
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Other Pertinent Course Information

Copyrights: The handouts used in this course are copyrighted. By “handouts” we mean all materials generated for this class, which include but are not limited to syllabi, in-class materials, class notes, solutions provided by the instructor, exams review sheets, and problem sets. Because these materials are copyrighted, you do not have the right to copy such handouts, unless the author expressly grants permission.

Submission of Work, Deadline Policy, and Late Submission Policy: All assignments must be submitted electronically using the eCampus Turnitin system by the due date and time specified in the assignment. E-mail submissions will not be accepted (they will be ignored without notice). Late submission beyond the deadline will not be accepted in general, unless a university sanctioned excuse is provided ahead of time. In case you have difficulties finishing an assignment contact the instructor before the deadline. Note that work turned-in on time is eligible for partial credit.

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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.”

Scholastic Dishonesty: As commonly defined, plagiarism consists of passing off as one’s own the ideas, work, writings, etc., that 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 have the permission of the 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 questions regarding plagiarism, please consult the latest issue of the Texas A&M University Student Rules http://student-rules.tamu.edu/rule52, under the section “Academic Mis-conduct.”
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Meeting times and location: WEB

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