NOTE to prospective students: This syllabus is intended to provide students who are considering taking this course an idea of what they will be learning. A more detailed syllabus will be available on the course site for enrolled students and may be more current than this sample syllabus. Summer term courses may be accelerated – please check the Ecampus Schedule of Classes for more information.

BA 576
Data And Text Mining

COURSE CREDIT:
(3) This course combines approximately 90 hours of instruction, online activities, and assignments for 3 credits.

PREREQUISITES, CO-REQUISITES AND ENFORCED PREREQUISITES:
PREREQS: BA 574 [C] and BA 575 [C].

COURSE DESCRIPTION:

BA 576. DATA AND TEXT MINING (3).
Examine how data/text analysis technologies can be used to improve decision making. The class covers the fundamental principles and techniques of data mining, text analysis, and uses real-world examples and cases to place data-mining techniques in context. Students will have hands-on experience with data/text mining software.

CONTACT INFORMATION:

Name: Dr. Jiexun Li
Office: Austin Hall 374
Phone: 541-737-6065
E-mail: Jiexun.Li@oregonstate.edu

For more information, contact: CAROL LEDER (Undergrad), 541-737-3716; JAMES COAKLEY (Grad), 122 AUST, 541-737-3716.

Sample syllabi may not have the most up-to-date information. For accuracy, please check the ECampus Schedule of Classes to see the most current instructor information. You can search for contact information by name from the OSU Home Page.

LEARNING RESOURCES:

No required textbook.
Supplementary readings/videos/tutorial in the form of web links, PDF, and other handouts posted will be posted on the course website.

You will need to use software (e.g., Rapidminer, IBM SPSS Modeler) to complete some assignments or class exercises in this course. These software packages will be available on COB lab computers. You will also be provided with instructions on downloading and installation.

**NOTE:** For textbook accuracy, please always check the textbook list at the OSU Bookstore website. Sample syllabi may not have the most up-to-date information.

Students can also click the ‘OSU Beaver Store’ link associated with the course information in the Ecampus schedule of classes for course textbook information and ordering.

**COURSE SPECIFIC MEASURABLE STUDENT LEARNING OUTCOMES:**

For online (Ecampus) courses, student learning outcomes must be identical to those in the on-campus course, even though the mode of delivery and course content might differ.

Student learning outcomes are learner-focused statements reflecting what a student will be able to do as a result of an instructional activity. Each outcome statement should start with a measurable action verb that indicates the level of learning, followed by a precise description of the learned behavior, knowledge, or attitude. Bloom's Taxonomy is a useful tool for choosing action verbs that accurately describe a desired level of student learning.

For example, an OSU faculty member will be able to:

1. Identify an appropriate action verb from Bloom's Taxonomy that describes a particular level of learning.
2. Describe the desired behavior a student will be able to exhibit upon successful completion of a course.

Slash (4xx/5xx) courses must have differentiated learning outcomes for graduate and undergraduate students (i.e. two separate sets of learning outcomes listed on the syllabus).

Baccalaureate Core, include category specific learning outcomes (verbatim) with course specific measurable student learning outcomes, as well as an explanation of how these outcomes will be achieved and assessed. See [http://oregonstate.edu/ctl/baccalaureate-core](http://oregonstate.edu/ctl/baccalaureate-core).

- Explain the importance and challenges of data and text mining in business
- Describe the foundations of natural language and text processing techniques
- Apply exploratory and predictive analytics techniques for data/text mining to solve business-related problems
- Evaluate and compare data/text mining solutions to business-related problems
COURSE CONTENT AND POLICIES:
Include concise outline of topics and/or activities

<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introduction, course overview</td>
</tr>
<tr>
<td>2</td>
<td>Data mining models and techniques</td>
</tr>
<tr>
<td>3</td>
<td>Parsing unstructured text I</td>
</tr>
<tr>
<td>4</td>
<td>Parsing unstructured text II</td>
</tr>
<tr>
<td>5</td>
<td>Exploratory analytics: co-occurrence analysis and clustering</td>
</tr>
<tr>
<td>6</td>
<td>Predictive analytics: text classification</td>
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<tr>
<td>7</td>
<td>Predictive analytics: sentiment analysis</td>
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<tr>
<td>8</td>
<td>Advanced topics on data/text analytics</td>
</tr>
<tr>
<td>9</td>
<td>Exam</td>
</tr>
<tr>
<td>10</td>
<td>Project presentations</td>
</tr>
</tbody>
</table>

EVALUATION OF STUDENT PERFORMANCE:
In the OSU online catalog, refer to AT 18 and AR 19 regarding assignment of grad

Individual grades will be based on a 'weighted' average as follows:

<table>
<thead>
<tr>
<th></th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Assignments</td>
<td>25%</td>
</tr>
<tr>
<td>Exam</td>
<td>25%</td>
</tr>
<tr>
<td>Final Project</td>
<td>40%</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Individual grades will be assigned as follows:
A: score >= 93%
A-: 90% <= score < 93%
B+: 87% <= score < 90%
B: 83% <= score < 87%
B-: 80% <= score < 83%
C+: 77% <= score < 80%
C: 73% <= score < 77%
C-: 70% <= score < 73%
D+: 67% <= score < 70%
D: 63% <= score < 67%
F: score < 63%

Assignments will be posted on Canvas and announced in class. To receive full credit, assignments should be typed and must be of a professional quality (e.g., spell check, grammar,
use of non-sexist language wherever appropriate). **Late submission of assignments** will result in a 10-20% penalty for each day the homework is late. A computer/printer crash is not an acceptable excuse for late submissions. There are **no extra credit opportunities** in this class to make up any missed lecture, assignment, exam etc.

**Exam:** There will be an in-class open-book exam that tests you knowledge and skills in data and text mining.

**Final Project:** Each student must join a team of 2~3 to complete a project. See the project requirement in separate documents.

**Miscellaneous** category includes attendance, in-class discussion, professional behavior, student conduct (as per OSU and College of Business regulations), and in-class exercises. It is important that you attend classes regularly and are punctual so as to not miss any activities in the miscellaneous category. *During class time, if a student engages in disruptive behavior, or if they use an electronic device for purpose(s) not related to BA302, then they can expect penalty points at the end of the term in the miscellaneous category or receive an “F” grade in the miscellaneous category.*

**If you miss class:** If a student is unable to attend a class session, it is the student's responsibility to acquire the class notes, assignments, announcements, etc. from a classmate. The instructor will be unable to give private lectures for those that miss class. *If a student misses more than five lectures or exercises in the miscellaneous category, then they could receive a severe penalty at the end of the term in the miscellaneous category and may end up receiving an “F” grade in the miscellaneous category.*

Since students may have circumstances that may make it difficult to attend all lectures in full length (e.g., illness, family emergency etc.), it is expected that **two lowest scores pertaining to the miscellaneous category will be dropped for each student.** Each class lecture can contribute up to a maximum of five points towards the miscellaneous category.

**Absence:** It is expected that students will notify instructor via e-mail at least one day in advance of missing any class. Please note that missing part of a class may also be considered as an absence. Typically, no make-ups are given in this class.

**Grade Appeals:** If you are not satisfied with a grade you have received for an exam, or assignment, you are welcome to discuss it with the instructor outside class hours. The instructor reserves the right to ask the student to provide a written grade appeal. In such cases, written grade appeals with appropriate justification have to be made within one week from the time the grades are given out by the instructor. Incomplete grades will be given only under circumstances deemed unusual by the instructor, and will require appropriate documentation.
Incomplete Grades: Students will not be given an incomplete grade in the course unless there is a documented reason (e.g., medical reason) approved by the instructor and the conditions of the case warrant an incomplete grade. Substandard performance or missing classes without appropriate documentation/reason does not warrant an incomplete grade. OSU guidelines will be followed even when an incomplete grade is approved by the instructor.

COURSE SITE LOGIN INFORMATION
Information on how to login to your course site can be found HERE.

STATEMENT REGARDING STUDENTS WITH DISABILITIES
Oregon State University is committed to student success; however, we do not require students to use accommodations nor will we provide them unless they are requested by the student. The student, as a legal adult, is responsible to request appropriate accommodations. The student must take the lead in applying to Disability Access Services (DAS) and submit requests for accommodations each term through DAS Online. OSU students apply to DAS and request accommodations at our Getting Started with DAS page.

Accommodations are collaborative efforts between students, faculty and Disability Access Services (DAS). Students with accommodations approved through DAS are responsible for contacting the faculty member in charge of the course prior to or during the first week of the term to discuss accommodations. Students who believe they are eligible for accommodations but who have not yet obtained approval through DAS should contact DAS immediately at 541-737-4098.

Additionally, Canvas, the learning management system through which this course is offered, provides a vendor statement certifying how the platform is accessible to students with disabilities.

ACADEMIC INTEGRITY AND STUDENT CONDUCT (OSU POLICY)
Students are expected to be honest and ethical in their academic work. Intentional acts of academic dishonesty such as cheating or plagiarism may be penalized by imposing an “F” grade in the course.

Student conduct is governed by the universities policies, as explained in the Office of the Dean of Student Life: Student Conduct and Community Standards. In an academic community, students and faculty, and staff each have responsibility for maintaining an appropriate learning environment, whether online or in the classroom. Students, faculty, and staff have the responsibility to treat each other with understanding, dignity, and respect.

Students are expected to conduct themselves in the course (e.g. on discussion boards, email postings, etc.) in compliance with the university’s regulations regarding civility. Students will be expected to treat all others with the same respect as they would want afforded to themselves.
themselves. Disrespectful behavior (such as harassing behavior, personal insults, inappropriate language) or disruptive behaviors are unacceptable and can result in sanctions as defined by Student Conduct and Community Standards.

For more info on these topics please see:
- Statement of Expectations for Student Conduct
- Student Conduct and Community Standards - Offenses
- Policy On Disruptive Behavior

PLAGIARISM

You are expected to submit your own work in all your assignments, postings to the discussion board, and other communications, and to clearly give credit to the work of others when you use it. Academic dishonesty will result in a grade of “F.”

- Statement of Expectations for Student Conduct
- Avoiding Academic Dishonesty

TECHNICAL ASSISTANCE

If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the OSU Computer Helpdesk online.

- COURSE DEMO
- GETTING STARTED

TUTORING

For information about possible tutoring for this course, please visit our Ecampus NetTutor page. Other resources include:
- Writing Center
- Online Writing Lab

STUDENT EVALUATION OF TEACHING

The online Student Evaluation of Teaching form will be available in week 9 and close at the end of finals week. Students will be sent instructions via ONID by the Office of Academic Programs, Assessment, and Accreditation. Students will log in to “Student Online Services” to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted. Course evaluation results are very important and are used to help improve courses and the learning experience of future students. Results from questions are tabulated anonymously and go directly to instructors and unit heads/ supervisors. Unless a comment is “signed,” which will associate a name with a
comment, student comments on the open-ended questions are anonymous and forwarded to each instructor. “Signed” comments are forwarded to the unit head/supervisor.

**REFUND POLICY INFORMATION**

Please see the [Ecampus website](http://ecampus.oregonstate.edu) for policy information on refunds and late fees.