



**FLORIDA
ATLANTIC
UNIVERSITY**

NEW COURSE PROPOSAL Undergraduate Programs

Department Marketing/Hospitality Management Program

College College of Business

(To obtain a course number, contact erudolph@fau.edu)

UUPC Approval _____

UFS Approval _____

SCNS Submittal _____

Confirmed _____

Banner Posted _____

Catalog _____

Prefix HFT
Number 4881

(L = Lab Course; C = Combined Lecture/Lab; add if appropriate)

Lab Code

Type of Course

Lecture

Course Title

Revenue Management and Predictive Analytics in the Hospitality & Tourism Industry

Credits *(Review Provost Memorandum)*

3

Grading *(Select One Option)*

Regular

Pass/Fail

Sat/UnSat

Course Description *(Syllabus must be attached; Syllabus Checklist recommended; see Guidelines)*

Exploration of revenue management, big data, and predictive analytics within the hospitality and tourism industry. The course will use a viewpoint of firm value and overall contribution to financial performance. Students will identify direct links between big data and firm performance while utilizing strategic management, prediction, and forecasting. A variety of data sources will be examined. Through analysis, students will learn to manage firms using an analytic culture that turns information into insight.

Effective Date *(TERM & YEAR)*

Fall, 2020

Prerequisites, with minimum grade*

Corequisites

Registration Controls *(Major, College, Level)*

Minimum 60 credit hours

***Default minimum passing grade is D-. Prereqs., Coreqs. & Reg. Controls are enforced for all sections of course**

WAC/Gordon Rule Course

Yes

No

WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to proposal. See [WAC Guidelines](#).

Intellectual Foundations Program (General Education) Requirement *(Select One Option)*

None

General Education criteria must be indicated in the syllabus and approval attached to the proposal. See [GE Guidelines](#).

Minimum qualifications to teach course

18 graduate credit hours in hospitality, tourism, or closely related field

Faculty Contact/Email/Phone

Anil Bilgihan, anil.bilgihan@fau.edu, 7-3666

List/Attach comments from departments affected by new course

ITOM Dept., College of Business; See attached

Approved by

Department Chair _____

College Curriculum Chair _____

College Dean _____

UUPC Chair _____

Undergraduate Studies Dean _____

UFS President _____

Provost _____

Date

3/17/2020

3/17/2020

March 17, 2020

3-30-20

3-31-20

Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.



HFT4881
CRN & Section: TBD
Revenue Management and Predictive Analytics in the Hospitality and Tourism
Industry
Fall 2020
TBA
3:15 pm – 6:15 pm/ W/F

Professor Information

Name: Dr. Anil Bilgihan
Office Address: Boca Raton Campus, Fleming Hall, 3rd Floor, Office #316
Email: abilgihan@fau.edu *Email is my preferred method of communication
Phone Number: 561-297-3190 (office), 717-715-2050 (cellular / text)
Skype: anilbilgihan

Office Hours

Tuesdays: 3:20PM – 6:00PM
Thursdays: 4:10PM – 6:10PM
Dr. Bilgihan is also available by appointment any day or evening with advance notice. Further, he may be reached via cell phone, email, or Skype 7 days per week.

Required Text and Materials

The Analytic Hospitality Executive: Implementing Data Analytics in Hotels and Casinos by Kelly A. McGuire and Dexter E. Wood Jr.
ISBN-13: 978-1119129981

Marketing Analytics: Data-Driven Techniques with Microsoft Excel by Wayne L. Winston
ISBN-13: 978-1118373439

Selected Cases from distributed online via Canvas

Recommended Text and Materials

Other reading materials will be available online in PDF format.

Course Description

Exploration of revenue management, big data, and predictive analytics within the hospitality and tourism industry. The course will use a viewpoint of firm value and overall contribution to financial performance. Students will identify direct links between big data and firm performance while utilizing strategic management, prediction, and forecasting. A variety of data sources will be examined. Through analysis, students will learn to manage firms using an analytic culture that turns information into insight.

Course Prerequisites and Credit Hours

3 Credit Hours

Prerequisite: None

Course Learning Objectives

After successfully completing this course, you should be able to:

- Use predictive analytics to forecast hotel occupancy
- Evaluate hotel performance by analysis and visualization of Smith Travel Research (STR) data
- Use predictive analytics and experimental design to better understand consumer price sensitivity
- Use predictive analytics to best set prices across room types (i.e. determine price premiums for room categories)
- Use statistical tools to analyze critical revenue sources in hospitality and tourism businesses

Grading Scale

<u>Grading Scale (%)</u>	
94-100	A
90-93	A-
87-89	B+
84-86	B
80-83	B-
77-79	C+
74-76	C
70-73	C-
67-69	D+
64-66	D
60-63	D-
0 - 59	F

Curving: There is **no** curving in this course on any individual assessment *or* on overall course grades.

Extra Credit: There are no opportunities for extra credit in this course.

Course Evaluation Method

Your final grade is a function of your classroom participation, required &/or optional submissions, and examination grades.

20% Exam

30% Assignments

40% Final Project

10% Class Participation

All letter grades are calculated using the weighted average from all items listed. Please refer to the above grading scale when determining your overall course grade.

Exact details and specifics regarding exam dates and procedures will be provided during the semester by the professor. Content for the exams may be taken from **any** source: live classroom lectures, email discussions, assigned chapters in the textbook, assigned articles, class handouts, homework assignments, guest lecturers, or website links deemed important.

Students are **required** to check their FAU email accounts on a regular basis as exam information is often communicated via email.

Class Project

Team Meetings

All teams will need to meet regularly to complete this project. Remember to plan carefully prior to each meeting (select a facilitator, plan and determine an agenda). At the end of each meeting it is a good idea to recap to ensure that everyone is clear on the action steps he or she needs to take.

Contributions and Peer Evaluation

Each student must contribute equally to the development of the marketing plan and must participate in the oral presentation. You will evaluate the work of your team members.

The number of pages is to be approximately 14-20 (excluding the Appendix), double spaced, and the font size to be 10-12.

Additional Course Policies

Missing Exams

No assessments may be taken late or turned in late *except* as indicated elsewhere in the syllabus for approved reasons (i.e., illness, university-approved absences, religious accommodations, extreme emergencies, etc.). Exams submitted late will only have questions graded that were submitted prior to the end time of the examination.

Late Assignments

No assignments or projects may be taken late or turned in late *except* as indicated elsewhere in the syllabus for approved reasons (i.e., illness, university-approved absences, religious accommodations, extreme emergencies, etc.). Exams submitted late will only have questions graded that were submitted prior to the end time of the examination.

Attendance Policy

Attendance is not mandatory. The professor believes that students are adult learners and it is up to the student himself or herself if he or she wishes to attend on a regular basis and fully participate in the learning process. Remember, however, that active learning and attendance as well as class involvement regularly correlates positively with better academic performance.

Holidays

TBD

Etiquette and Netiquette Policy

Electronic Devices: The use of laptop computers and tablets in class is permitted solely in support of learning activities – taking notes, for example. Students may not use instant messenger, write emails, chat, etc. or do anything other than taking notes with a laptop computer. These other activities are bothersome to those fully engaged in the learning process.

Cell phones, PDAs, and other electronic devices capable of communicating outside the classroom *must* be turned off while class is in session. Please do not put them on vibrate and check them during class. Turn them off and place them out of view during the entire class session.

The professor respects each individual to share his or her opinion when speaking in class and asks the same respect to have an uninterrupted class exempt from disturbances these electronic devices may cause.

These devices disturb your classmates far more than you may imagine. When guest speakers are presenting, *all* electronic devices must be turned off out of respect for the speaker.

Students who use their laptop computers for anything other than taking notes will be asked to leave class immediately. A second offense will result in a recorded, failing grade of F in the course.

Anti-plagiarism Software

Written components of any assignment or project may be submitted to anti-plagiarism software to evaluate the originality of the work. Any students found to be submitting work that is not their own will be deemed in violation of the University's honor code discussed above.

Email Account Requirements

FAU students sometimes have problems if they have their FAU emails forwarded to their personal account on another Internet Service Provider (ISP).

As a student in this course, you are **required** to utilize your FAU email address for all correspondence.

All electronic mail correspondence from the professor will be sent to the FAU email address you have on file. Please make sure this address is functioning and able to accept incoming emails.

Disability/Accessibility Policy Statement

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations (due to a disability) to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures.

SAS has offices across three of FAU's campuses: Boca Raton, Davie, and Jupiter. However, disability services are available for students on all campuses. For more information, please visit the SAS website at www.fau.edu/sas/

This course is distributed in a fully eLearning format. As such, the professor will not be able to identify any student's specific needs unless the student communicates this information to the professor. Please make sure that you forward requests for accommodations to the professor early in the semester (preferably during weeks 1-2 of the semester). The professor strives to provide the best learning experience for all students in all cases – every attempt will be made to provide reasonable accommodations.

Students will experience a vast array of services at the Student Accessibility Services Office (SAS) including, but not limited to reader software, speech recognition, digital pens, ergonomic keyboards, various mice devices, standard and scientific calculators with speech, et al.

Lock Down Browser/eTesting Statement

Students do not need to install or utilize "Lock Down Browser" when taking either the midterm or the final for this course via Canvas. However, students are **required** to have all appropriate plug-ins and other necessary items installed on their laptops if they use their own equipment to take the eLearning assessments. Technical failure is not a valid excuse for a midterm or final exam makeup – or for submitting either the midterm or final exam beyond the scheduled expiration time.

If the student has any doubts about the currency of his or her hardware, software, or ability to use Canvas, he or she must use an on-campus computer lab or the FAU library to take the exam (whichever facility is open during the posted assessment hours –it is the student's responsibility to verify hours of computer lab or library operating hours in advance of the assessment). Student Tutorials in Canvas are available. After signing into Canvas, follow the tab at the top of the screen that says "Tutorials". Or, phone the Computer Help Desk at 561-297-3999.

Course Outline*

*The schedule below serves as a tentative overview of the course progression. It is subject to change infrequently based on the learning pace of the students, guest lecturer availability, and other criteria deemed appropriate by the professor. Please be sure to check your FAU emails on a regular basis for the latest class information.

Last day to drop/add courses without consequences; courses are fee Liable after this date: January 16th

Last day to drop a course or withdraw without receiving an "F" in each course: February 16th

Week / Class	Assignment
Class 1 - January 11	Class overview discussion, syllabus review, details of class expectations for experiential learning, etc. Defining Hospitality Marketing, Marketing Research, Hospitality Industry Analytics The Role of Marketing Research and Data Analytics in the Hospitality Industry
Class 2 – January 12	Hospitality Marketing Research Process Review of Excel and Introduction to Qualtrics and Guest Surveys STAR Reports as a Market Research Tool Revenue Management Metrics (RevPAR, ADR, OR)
Class 3 – February 1	Slicing and Dicing Hospitality Marketing Data Using Charts to Summarize Hospitality Marketing Data Estimating Room Demand Curves and Using Solver to Optimize Room Price
Class 4 – February 2	Travel Market Insight Simple Linear Regression and Correlation Using Multiple Regression to Forecast Room Sales Using Neural Networks to Forecast Room Sales
Class 5 – February 22	Guest Insight What do Guests Want? Conjoint Analysis Discrete Choice Analysis Calculating Lifetime Customer Value
Class 6 – February 23	Travel Market Segmentation Cluster Analysis Classification Trees for Segmentation
Class 7 – March 14	Revenue Management Analytics and Data Visualization Tableau Measuring the Effectiveness of Hospitality & Tourism Advertising Media Selection Models Pay per Click Online Advertising
Class 8 – March 15	ANOVA Text Mining TripAdvisor Reviews Sentiment Analysis
Class 9 – April 4	Online Tools for Room Revenue Analytics Building a Strategic Analytic Culture in Hospitality Organizations
Class 10 – April 5	Recap / Trends
Class 11 – April 25	Group Presentations
Class 12 – April 26	Final Exam

Selected University and College Policies

Code of Academic Integrity Policy Statement

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty.

For more information, please see FAU Regulation 4.001 at: [FAU Regulation 4.001](#).

Disability / Accessibility Policy Statement

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS)—in Boca Raton, SU 133 (561-297-3880); in Davie, LA 131 (954-236-1222); or in Jupiter, SR 110 (561-799-8585) —and follow all SAS procedures. Their web site is: <https://fau.edu/sas>.

Religious Accommodation Policy Statement

In accordance with rules of the Florida Board of Education and Florida law, students have the right to reasonable accommodations from the University in order to observe religious practices, observances, and beliefs with regard to admissions, registration, class attendance and the scheduling of examinations and work assignments.

For further information, please see FAU Regulation 2.007 at: [FAU Regulation 2.007](#).

University Approved Absence Policy Statement

In accordance with rules of the Florida Atlantic University, students have the right to reasonable accommodations to participate in University approved activities, including athletic or scholastics teams, musical and theatrical performances and debate activities. It is the student's responsibility to notify the course instructor at least one week prior to missing any course assignment.

Incomplete Grade Policy Statement

A student who is passing a course, but has not completed all work due to exceptional circumstances, may, with consent of the instructor, temporarily receive a grade of incomplete ("I"). The assignment of the "I" grade is at the discretion of the instructor, but is allowed only if the student is passing the course.

The specific time required to make up an incomplete grade is at the discretion of the instructor. However, the College of Business policy on the resolution of incomplete grades requires that all work required to satisfy an incomplete (“I”) grade must be completed within a period of time not exceeding one calendar year from the assignment of the incomplete grade. After one calendar year, the incomplete grade automatically becomes a failing (“F”) grade.

Withdrawals

Any student who decides to drop is responsible for completing the proper process required to withdraw from the course.

Disruptive Behavior Policy Statement

Disruptive behavior is defined in the FAU Student Code of Conduct as “... *activities which interfere with the educational mission within classroom.*” Students who behave in the classroom such that the educational experiences of other students and/or the instructor’s course objectives are disrupted are subject to disciplinary action. Such behavior impedes students’ ability to learn or an instructor’s ability to teach. Disruptive behavior may include, but is not limited to: non-approved use of electronic devices (including cellular telephones); cursing or shouting at others in such a way as to be disruptive; or, other violations of an instructor’s expectations for classroom conduct.

Faculty Rights and Responsibilities

Florida Atlantic University respects the right of instructors to teach and students to learn. Maintenance of these rights requires classroom conditions which do not impede their exercise. To ensure these rights, faculty members have the prerogative:

- To establish and implement academic standards
- To establish and enforce reasonable behavior standards in each class
- To refer disciplinary action to those students whose behavior may be judged to be disruptive under the Student Code of Conduct.