Florida Atlantic University
School of Urban and Regional Planning

Course Title: RI: Web-Based Applications in Planning
Course URP 4273
Summer
3 Credit Hours

Instructor: *Diana Mitsova, PhD*
Classroom: SO 276 VPT Classroom
Face-to-face (F2F) meetings: Monday, 6:30 pm to 9:40 pm >>
Tentative ***May 13, June 3, June 17, July 8, July 29, Aug 2***
Office Location: *SO 273*
Office Hours: *Monday, 3:00 am to 6:30 pm (May 13, June 3, June 17, July 8, July 29)*
Monday, 9:00 am to 3:00 pm || Wednesday, 9:00 am to 3:00 pm || or by appointment
Contact Phone Number: 561-297-4285
Email: dmitsova@fau.edu
Teaching Assistant Contact Information (if applicable) –

Course Prerequisites: No prerequisites.
Course Co-requisites: *No co-requisites.*

Time Commitment per Credit Hour: This course has 3 credit hours. For traditionally delivered courses, not less than one (1) hour of classroom or direct faculty instruction each week for fifteen (15) weeks per Fall or Spring semester, and a minimum of two (2) hours of out-of-class student work for each credit hour. Equivalent time and effort is required for Summer Semesters, which may be offered over a shortened time frame.

Welcome: This course focuses on web-based urban and regional planning applications. Included are demonstrations of environmental planning, community and economic development planning, urban design, and land use planning. More specifically, students will acquire skills working with **Census data**, **Business Analyst**, **Network Analyst**, and **GeoPlanner** (a web application for land-based planning and design). Students will learn how to create community-wide land use design, suitability modeling, scenario-based design, comparisons and evaluation of alternatives using various types of spatial analysis.

Placement in Program: *This is an elective course for Bachelor of Urban and Regional Planning and Bachelor of Urban Design programs are also welcome to take the course to improve their proficiency in web-based applications in planning.*

Course Description/Introduction (*as in the FAU Catalog*)
The course focuses on web-based urban and regional planning applications and how they can provide decision support to community-wide land use design, suitability modeling, scenario-based design, comparisons and evaluation of alternatives.

Course Objectives
Upon completion of the course, students are expected to (1) master and apply land-related planning and design activities using geographic information systems and associated analytical methods; (2) understand the applicability of these methods in various contexts in the field of urban and regional planning. More specifically, the course focuses on the following learning outcomes:

1. Upon successful completion of the course, the students will become proficient in mapping Census data using boundary TIGER files and American FactFinder.

2. Upon successful completion of the course, the students will be able to conduct a mock land planning project related to a redevelopment initiative and discuss specific applications of land-based analysis in urban and regional planning.
3. Upon successful completion of the course, the students will be able to develop new scenarios and sketch new features.
4. Upon successful completion of the course, the students will be able to conduct assessment and evaluation of the proposed alternative scenarios.
5. Upon successful completion of the course, the students will be able to synthesize the knowledge acquired throughout the course and summarize the results and share and disseminate the results through the reporting tools of ESRI's GeoPlanner.

Research Intensive Course Designation (RI) and Requirements

This course contains an assignment or multiple assignments designed to help students conduct research and inquiry at an intensive level. If this class is selected to participate in the university-wide assessment program, students will be asked to complete a consent form and submit electronically some of their research assignments for review. Visit the Office of Undergraduate Research and Inquiry (OURI) for additional opportunities and information at http://www.fau.edu/ouri.

Student Learning Outcomes
The research project is designed to achieve all six of the following Student Learning Outcomes (SLOs):
SLO 1: Knowledge. Students are expected to demonstrate content knowledge, and knowledge of core principles and skills.
SLO 2: Formulate Questions. Students are required to formulate research questions, scholarly or creative problems in a manner appropriate to the planning discipline.
SLO 3: Plan of Action. Students are expected to develop and implement a plan of action to address research and inquiry questions or scholarly problems.
SLO 4: Critical Thinking. Students are expected to apply critical thinking skills to evaluate information, their own work, and the work of others.
SLO 5: Ethical Conduct. Students are expected to identify significant ethical issues in research and inquiry and/or address them in practice.
SLO 6: Communication. Students will convey all aspects of their research and inquiry (processes and/or products) in appropriate formats, venues, and delivery modes.

Required Text and Materials

ESRI. 2008*. **Using ESRI Business Analyst***. Redlands, CA: ESRI Press. URL
http://downloads2.esri.com/support/documentation/other_/1473Using_ArcGIS_Business_Analyst.pdf
pp. 1-11;
Chapter 2, pp. 19-44
Chapter 8, pp. 163-201

GeoPlanner Tutorials – provided by the instructor

Course Schedule

MODULE	DATES	TOPIC	READ/LISTEN/VIEW	TO DO
1	Mon. May 13 – Sun. May 26	**F2F meeting – May 13** Introduction to Course *Topic:* ***Working with Business Analyst*** *Both tracts* *Skill Development:* ⤴ *Mapping drive-time areas*	Syllabus Course Schedule Instructor Introduction Lab 1 posted on Canvas	Review the syllabus, course schedule and the due dates of the assignments Module 1 Discussion due Lab 1 due
2	Mon. May 27 – Sun. June 9	**F2F meeting – June 3** *Topic:* ***Track 1: Introduction to GeoPlanner*** *Skill Development:* ⤴ *Create your first GeoPlanner project* ⤴ *Work with data layers in ArcGIS Online* ⤴	Module 2 Discussion questions. Lab 2 posted on Canvas	Module 2 Discussion due Lab 2 due
3	Mon. June 10 – Sun. June 23	**F2F meeting – June 17** *Topic:* ***Track 1: Creating land development scenarios and sketching new features with GeoPlanner*** *Skill Development:* ⤴ *Developing scenarios in land use planning* ⤴ *Mapping service areas*	Module 3 Discussion questions. Lab 3 posted on Canvas	**Research proposal presentation** Module 3 Discussion due Lab 3 due
4	Mon. June 24 – Sun. July 14	*Topic:* ***Assessment of alternatives*** *Skill Development:* ⤴ *Assessment of alternative scenarios* ⤴ *Creating Origin-Destination matrices and calculating total travel time (e.g., before and after a flood event)*	Module 4 Discussion questions. Lab 4 posted on Canvas	Module 4 Discussion due Lab 4 due
5	Mon. July 15 – Sun. July 21	**F2F meeting – July 8** **Workshop**	Discussion of the projects	Individual work on the projects

6	Mon. July 22 – Mon. August 2	**F2F meeting – July 29** **Final Presentations** *Both tracks*	Lab 5 posted on Canvas >>	**Individual/ Group presentations: July 29** **Final report due Aug 2** >> To be submitted on Canvas.

Course Delivery Mode

This is a mostly online course accessible only through FAU's learning management system—Canvas. You must log into Canvas with your FAU ID and Password to access the materials and assignments in this course. If you do not know your FAU ID or Password click the following link for help. Link to Office of Information Technology Help.

In addition, you will be given a student folder on the course workspace. Do not save your work on the local machine, Use your student folder space.

The course is organized into modules with dates provided for each module. Dates and durations for each module may vary so please pay close attention to start and due dates. The course begins with the START HERE page, which will familiarize you with the organization and navigation of the course. You will open a new learning module to access the assigned reading materials, PowerPoints, and other relevant materials for each subsequent module.

Course Assessments, Assignments, Grading Policy, and Course Policies

Assessments for this Course

Students are expected to complete reading assignments, prepare written assignments, and work in teams. THE TEAMS SHOULD BE OF NO MORE THAN 2 STUDENTS. Grades will be based on:

Lab assignments (4 @ 10% each)	40%
Discussions (4 @ 2% each)	8%
Research proposal presentation	15%
Final presentation	7%
Final Report	30%

Module	Graded Coursework	Due Date	Points Possible
Module 1	Module 1 Discussion	May 26	2
	Lab 1	May 26	10
Module 2	Module 2 Discussion	June 9	2
	Lab 2	June 9	10
	Research proposal presentation	June 17	15
Module 3	Module 3 Discussion	June 23	2
	Lab 3	June 23	10
Module 4	Module 4 Discussion	July 7	2
	Lab 4	July 14	10
Module 5	**Final Presentation**	July 29	7
Final week	**Final Research Paper**	August 2	30
Total			**100**

Lab Assignments (40%). There will be **4** lab assignments. The **Lab Assignments are individual assignments.** Therefore, the completion of each lab assignment is a necessary prerequisite to move to the next step in the analysis. The assignments will test your analytical and problem solving skills as well as your understanding and ability to "carry over" methods and techniques learned during our lab exercises. It is very important to present your results in a professionally written manner.

Discussions (8%). As part of the course assignments, you will be asked to post an original submission to the module discussion and reply to at least one other student's posts with a substantive response. All discussion questions will be based on the reading required for the course. The readings discuss important aspects of the land development process and will inform the steps in the analysis. A substantive response adds value to the discussion by bringing new ideas, research, evidence, etc. to the conversation. "I agree," "Ditto" and the like are not acceptable replies. Rules of Netiquette must be followed. Full sentences, proper spelling, proper source citations, etc., are expected. Ensure that postings contain detailed responses to each question and that course and chapter contents are applied in your discussion responses. For example, consider taking a new approach in presenting chapter content, cite new examples, present external research (paraphrase, avoid unnecessary and/or lengthy quotations; **cite references)**. The posts should be entered directly into the discussions, or as an attachment. All original posts must be submitted by 11:59 pm, EST, on the day each discussion assignment is due (1 point will be deducted for each day late). Responses to peers are due at 11:59pm, EST, on the day each discussion assignment is due. **The discussions are individual assignments.**

Research proposal presentation (15 %). Present your research idea in 12-15 slides. The presentation should include the following items:

1. **Topic:** Explain briefly the topic of your research. What aspect of urban sustainability will be pursued?
2. **Rationale and background information:** Support your rationale with findings from at least one academic article or report. Use in-text citations and include the sources in a references list.
3. **Problem statement, objectives and research questions:** State clearly your main study concern. The problem statement is the reason why the topic is important and relevant. What do you want to know/ change and why?
4. **Methods:** How are you going to address your proposed research questions?
5. **Outcomes:** Results possible benefits, relevance, or advantages that may be derived from your proposed solutions.
6. **References**

Final Project and presentation (30% + 7%). The final report will include description of the data collection, description of the methodology, data analysis and presentation of results. Your grade on the project will be based on (1) knowledge; (2) content; (3) research effort; (4) visuals quality. **Team work on the research project is allowed but the teams should include no more than 2 students. If you choose to work in teams, your name should appear on the corresponding parts of the lab assignments.**

Grade Scale:

Total Points	100-94	93-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-63	62-60	<60
Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

INTEGRATION OF SLOS AND RESEARCH ASSIGNMENTS

SLOs	Assignment Requirements and Assessments
SLO-1: Knowledge	Common base of knowledge required for effective professional practice in the field of planning including policy and organizational contexts. Students will demonstrate knowledge of key theories of planning, and multidisciplinary interpretative views of spatial data analysis. Students will also show knowledge of tools and practical skills needed to analyze planning problems related to environmental issues, transportation, economic development, historic preservation, and urban design, and understand urban and regional trends. Knowledge of written, oral communication, and advanced visualization techniques are also required to incorporate research findings in planning documents and present them through a website project.
SLO-2: Formulate Questions	Students are required to develop a problem statement in which they specifically address their research questions. The students are expected to present a clear concise statement of the research problem. When appropriate, the students should be able to break down principal problems into smaller solvable sub-problems.
SLO-3: Plan of Action	Students will create a plan of action for an intensive case study research that will encompass the following elements: (i) scope of the study; (ii) literature review; (iii) planning context; (iv) problem statement and research methodology; (v) analysis and findings; (vi) developing a tool or a proposed design solution. The students will develop hypothesis if needed, identify research methods and experimental designs, and select appropriate statistical techniques. Using the course timeline as a template, each student is expected to develop her/his own project management tasks related to the topic under consideration.
SLO-4: Critical Thinking	Students will demonstrate critical thinking skills by applying appropriate selection criteria for case study research taking into consideration multiple perspectives and examining implications and consequences of an action or planning alternative. The research project will also tap into students' ability to use evidence and reasoning to distinguish between categories or rank them, ability to apply standards and make judgments according to established personal, professional, or social rules or criteria, ability to build predictive models and transform knowledge. Peer reviews will be used for the initial drafts.
SLO-5: Ethical Conduct	**Students will learn about the ethical issues involved in producing and distributing spatial data. All students are required to familiarize themselves with the rules of academic integrity and the Code of Ethics of the American Planning Association. Student projects involving primary data collection through surveys and interviews will be required to complete CITI training. Please note that survey results can be included in the project report and posted on Canvas but survey research CANNOT be posted on the website unless a prior approval from the FAU Institutional Review Board has been obtained.** Also, make sure to include ***original images*** (ex. pictures, maps, renderings that you created). Avoid using Internet content or make sure it is not copyright protected.
SLO-6: Communication	Students will be required to professionally write and present a research proposal, a research report (e.g., analysis, findings and recommendations), and develop a website to communicate research results as outlined in SLO-3. Students are expected to demonstrate knowledge of technical report writing and visualization.

Late Assignments Policy

If you do not accept late work or apply penalties to late work, state so. Please note that students may not be penalized for absences due to participation in University - approved activities, including athletic or scholastics teams, musical and theatrical performances, and debate activities. Instructors must allow these students to make up missed work without any reduction in the student's final course grade. Reasonable accommodation must also be made for students participating in a religious observance.

Make-up Policy for Tests:

Clearly state your policy; this is your contract with the student. Please note that the University Provost, in order to identify and assist students at academic risk, requests that courses with freshmen have graded assignments well before midterm. If applicable, also note the minimum grade required to pass the course (if not a "D-").

Incomplete Grade Policy

The University policy states that 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.

Attendance Policy Statement

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

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, see University Regulation 4.001.

Plagiarism is unacceptable in the University community. Academic work that is submitted by students is assumed to be the result of their own thought, research, or self-expression. When students borrow ideas, wording, or organization from another source, they are expected to acknowledge that fact in an appropriate manner. Plagiarism is the deliberate use and appropriation of another's work without identifying the source and trying to pass off such work as one's own. Any student who fails to give full

credit for ideas or materials taken from another has plagiarized. This includes all discussion posts and other written and oral presentation assignments. If in doubt, cite your source!

Netiquette and Classroom Etiquette Policy

Netiquette

Due to the casual communication common in the online environment, students are sometimes tempted to relax their grammar, spelling, and/or professionalism. Please remember that you are adult students and professionals—your communication should be appropriate.

For more in-depth information, please see the FAU statement on Netiquette.

Classroom Etiquette/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 face-to-face and/or virtual 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.
For more information, please see the FAU Office of Student Conduct: Link to Student Conduct Policy

Expectations for Students

● Announcements: You are responsible for reading all announcements posted by the instructor. Check the course announcements each time you log in.

● Email: You are responsible for reading all of your course email and responding in a timely manner.

● Course-Related Questions: Post course-related questions to the FAQ discussion forum. This allows other participants with the same question to benefit from the responses. Also, make sure you review this forum prior to posting a question; it may have already been asked and answered in previous posts.

Instructor's Plan for Classroom Response Time & Feedback

● Email Policy: Except for Saturdays, Sundays, and holidays, instructor typically, will respond to messages within 48 hours. Such messages should only be used to communicate personal or confidential matters; otherwise, please use the FAQ discussion forum within the course.

● Assignment Feedback Policy: Feedback will be provided on submitted assignments within one week of the submission date. Some assignments may require a longer review period, which will be communicated to students by the instructor.

● Course-Related Questions: Except Saturdays, Sundays, and holidays, questions will, generally, be answered by instructors within 48 hours.

Technology and Computer Requirements

Minimum Technology Requirements for This Course

In this course you will need the following technology and computer requirements:

Hardware
- Dependable computer
- Computer speakers
- Headset with microphone
- Webcam
- ●

Software
- **ArcGIS 10.6.1 (please contact the instructor for a free 1-year student copy of the software)**
- Microsoft 365 Suite Link to Download
- Reliable web browser (recommended Chrome or Firefox)
- Java – Link to Download and/or Link to Verify Java on your computer
- Adobe Flash Player: Link to Download
- Mobile App: Instructions on how to download the Canvas App on an iOS device Link for iOS Instructions or Android device Link for Android Instructions

Internet Connection
- Recommended: Broadband (high-speed) Internet connection with a speed of 4 Mbps or higher
- To function properly, Canvas requires a high-speed Internet connection (cable modem, DSL, satellite broadband, T1, etc.). The minimum Internet connection speed to access Canvas is a consistent 1.5 Mbps (megabits per second) or higher.
- To check your Internet speed click here.

Minimum Technical Skills Requirements

The general and course-specific technical skills a student must have to succeed in the course include but are not limited to:

1. Accessing Internet.
2. Using Canvas (including taking tests, attaching documents, etc.).
3. Using email with attachments.
4. Creating and submitting files in commonly used word processing program formats such as Microsoft Office Tools.
5. Copying and pasting functions.
6. Downloading and installing software.
7. Using presentation, graphics, and other programs.
8. Posting and commenting in an online discussion.
9. Searching the FAU library and websites.

Computer Requirement - Basic computer specifications for Canvas Link to Specifications

Operating System
- A computer that can run Mac OSX or Win 7.0 or higher.

Peripherals
- A backup option should be available to minimize the loss of work. This can be an external hard drive, a USB drive, cloud storage, or your folder on the FAU servers.

Software
- Once logged in to Canvas make sure your Internet browser is compatible
- Other software may be required for specific learning modules. If so, the necessary links to download and install will be provided within the applicable module.

Technical Support
In the online environment, technical issues are always possible (e.g., lost connection, hardware or software failure). Many of these can be resolved relatively quickly, but if you wait until the last minute

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before due dates, the chances of these glitches affecting your success are greatly increased. Please plan appropriately. If a problem occurs, it is essential you take immediate action to document the issue so your instructor can verify and take appropriate action to resolve the problem. Please take the following steps when a problem occurs:

**Most issues in Canvas can be resolved by clicking on the "Help" tab located on the menu bar. **

By clicking the "Help" tab you will be able to:
- Report a Problem
- Search Canvas Guides

Additional Technical Support
1. Contact the eLearning Success Advisor for assistance: 561-297-3590
2. If you can, make a Print Screen of the monitor when the problem occurs. Save the Print Screen as a .jpg file. If you are unfamiliar with creating a Print Screen file, visit <u>Link to Print Screen Instructions.</u>
3. Complete a Help Desk ticket <u>Link to Help Desk</u>. Make sure you complete the form entirely and give a full description of your problem so the Help Desk staff will have the pertinent information in order to assist you properly. This includes:
   a. Select "Canvas (Student)" for the Ticket Type.
   b. Input the Course ID.
   c. In the Summary/Additional Details section, include your operating system, Internet browser, and Internet service provider (ISP).
   d. Attach the Print Screen file, if available.
4. If you do not hear back from the Help Desk within a timely manner (48 hours), it is your responsibility to follow up with the appropriate person until a resolution is obtained.
5. Once you have submitted a Help Desk Ticket, inform your instructor. Include all pertinent information of the incident (3b-d above). Keep your instructor informed of the status.

Support Services and Online Resources

Office of Information Technology Online Help Desk	https://helpdesk.fau.edu/TDClient/Home/
FAU Libraries	http://www.fau.edu/library/
Center for Learning and Student Success	http://www.fau.edu/class/
University Center for Excellence in Writing	http://www.fau.edu/UCEW/
Math Learning Center	http://www.math.fau.edu/mlc/
Office of Undergraduate Research and Inquiry	http://www.fau.edu/ouri/
Student Accessibility Services	http://fau.edu/sas/
Office of International Programs and Study Abroad	http://www.fau.edu/goabroad/
Freshman Academic Advising Services	http://www.fau.edu/uas/index.php

Faculty Rights and Responsibilities

Florida Atlantic University respects the rights 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*.

Instructor reserves the right to adjust this syllabus as necessary.

Selected University and College Policies

Disability 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/.

Counseling and Psychological Services (CAPS)

Center Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to http://www.fau,edu/counseling/.

Grade Appeal Process

A student may request a review of the final course grade when s/he believes that one of the following conditions apply:
- There was a computational or recording error in the grading.
- Non-academic criteria were applied in the grading process.
- There was a gross violation of the instructor's own grading system.
- Procedures for a grade appeal may be found in Chapter 4 of the University Regulations.

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 and beliefs with regard to admissions, registration, class attendance, and the scheduling of examinations and work assignments. For further information, please see Academic Policies and Regulations.

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 instructor at least one week prior to missing any course assignment.

Drops/Withdrawals

Students are responsible for completing the process of dropping or withdrawing from a course. Please click on the following link for more information on dropping and/or withdrawing from a course. Link to FAU Registrar Office