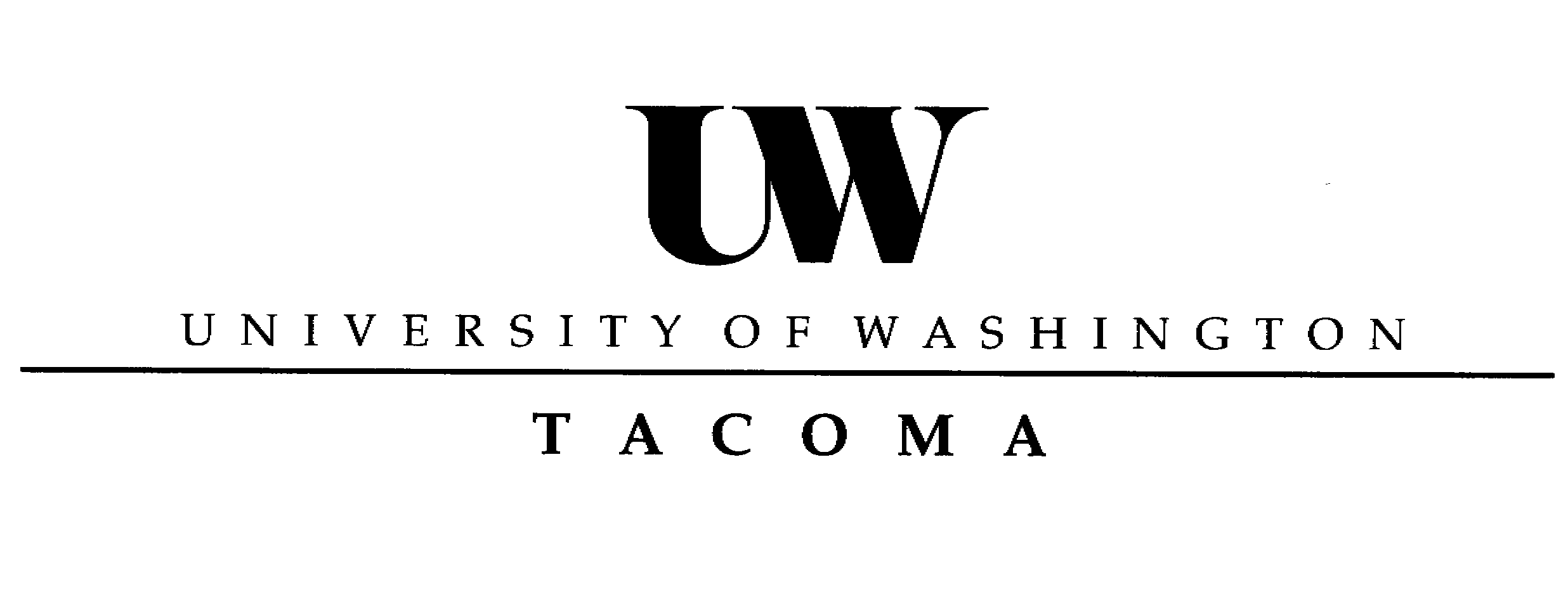
****

**T CORE 113**

**Mobile Technology and Healthcare Delivery**

**Winter 2019**

Location: Cherry Parkes 334A

Time: 9:30 – 10:50 AM Mondays, Wednesdays and Fridays

Credits: 5 credits

Instructor: Sharon S. Laing, PhD

Phone: 253-692-4475

E-mail: [laings@uw.edu](mailto:laings@uw.edu)

Office: CP 328

Office Hours By appointment

**Course Description**

The course introduces the practice of integrating smartphones, wearable devices, mobile apps, web cams, video devices, and text messaging to provide healthcare services to the population at large.

**Course Objectives**

At the end of the course, students should be able to:

1. Describe mobile health promotion and telehealth*;*
2. Identify and describe mobile devices used to promote health and wellness;
3. Critically evaluate existing health-based mobile applications;
4. Describe the benefits/risks of using mobile devices to promote health;
5. Develop a blueprint for a health-based mobile application;
6. Apply knowledge of mobile technology and telehealth to individuals with varied health conditions.

**Required Text**

No text required

Access to smartphone, tablet, laptop or personal computer

**Articles and Other Readings**

(PDFs of all readings provided by instructor)\*

Istepanian RS & Woodward B. (2017). Smart m-Health Sensing. In RSH Istepanian and B Woodward. *m-Health: Fundamentals and Applications* (pp 23 – 58). Piscataway, NJ. IEEE Press. (Reading provided by instructor)

Picot, J. (2015). What Telehealth Can Do For You: Electronic and Mobile Health Care in the Connected Age. [Kindle

Version] Retrieved from Amazon. (Readings provided by instructor)

Herzlinger, RE (2006). Why innovation in healthcare is so hard. *Harvard Business Review.* Retrieved from,

<https://hbr.org/2006/05/why-innovation-in-health-care-is-so-hard>

West, D. (2012). How Mobile Devices are Transforming Healthcare. *Issues in Technology Innovation,* No 18.

Arsand, E., Tatara, N., Ostengen, G., et al. (2010). Mobile phone-based self-management tools for type 2 diabetes: The

few touch application. *J Diabetes Sci Technol,* 4 (2), 328 – 336.

Carter, M.C., Burley, V.J., Nykajer, C., et al. (2013). Adherence to a smartphone application for weight loss compared to

website and paper diary: Pilot randomized controlled trial. *J Med Internet Res*, 15 (4), e32.

Britto, M.T., Munafo, J.K., Schoettker, P.J. (2011). Pilot and feasibility test of adolescent-controlled text message

reminders. *Clin Pediatr,* 51,114 – 121.

Strandbygaard, U., Thomsen, S.F., Backer, V. (2010). A daily SMS reminder increases adherence to asthma treatment.

A three-month follow-up study. *Respir Med*,104, 166-171.

Prociow, P., Wac, K., Crow, I. (2012). Mobile psychiatry: Towards improving the care for bipolar disorder. *Int J Ment*

*Health.* doi: 10.1186/1752.4458-6-5.

Borrelli, B. and Ritteband, L,M. 2015. Special Issue on eHealth and mHealth. *Health Psychol*, 34, suppl, 1205 -1208,

<https://www.apa.org/pubs/journals/releases/hea-hea0000323.pdf>

The mHealth Opportunity in Sub-Sahara Africa: The Path towards Practical Application. (2012) *Deloitte*

<http://www2.deloitte.com/content/dam/Deloitte/nl/Documents/technology-media-telecommunications/deloitte-nl-mhealth.pdf>

**Videos**

*MHealth*

Coleman, T (2017). A Temporary Tattoo that Brings Hospital Care to the Home. Retrieve from,

<https://www.ted.com/talks/todd_coleman_a_temporary_tattoo_that_brings_hospital_care_to_the_home>

Daniel Kraft (2011). Medicine Future? There’s an app for that. Video retrieved from,

<https://www.ted.com/talks/daniel_kraft_medicine_s_future?language=en>

Locke, M (2014). How to Get Started in Mobile UI Design. Video retrieved from

<https://www.youtube.com/watch?v=0l3c1aNP3Og>

Rachel McKendry (2015). Going Viral: The Digital Future of Public Healthcare. Video retrieved from

<https://www.youtube.com/watch?v=vRK7KKQH9Ck>

Vandervoort, P. (2013). TEDxCambridge. *Mobile Health – The Future of Medicine?* Video retrieved from

<https://www.youtube.com/watch?v=9Hi8jm80uJI>

Evans, N. (2013). Veterans Health Administration*. Mobile Applications*. Video retrieved from

<https://www.youtube.com/watch?v=jlBRmgLGSdw&ebc=ANyPxKqv7WV3FIy-f4aTYC-S8sEVq-ToiDz0F247HLCTnf23CfWkRFpIlNPtoi74jCPl6Boc3UtNlRrxosRDFaH4SRTA2ugAuw>

*Telemedicine*

Harvard University (2015). TELEHEALTH: How New Technologies Are Transforming Health Care. Video retrieved from

<https://www.youtube.com/watch?v=8C0qB4w_fk8>

National Center for Telehealth and Technology. (2013). *On the Frontier of Telehealth*. Video retrieved from

<https://www.youtube.com/watch?v=iIpWjfR2k9I>

Veterans Health Administration. (2009). *VA-Telehealth: Real Time Access to Healthcare*. Video retrieved from

<https://www.youtube.com/watch?v=JJvmsMZoBzw>

Zang, A. (2014). TEDxCambridgw. *Remote Heart Diagnosis through Digital Tablets*. Video retrieved from

<https://www.youtube.com/watch?v=NFIOuy3J-IQ>

*Special Populations: Indian Healthcare, Correctional Institutions, Army Veteran*

VOA News (2010). *Telemedicine in Rural India*. Video retrieved from

https://www.youtube.com/watch?v=4LW\_shT9yzU

In Place Medical (2009). *UTMB Correctional Managed Care Telemedicine System*. Video retrieved from

<https://www.youtube.com/watch?v=dq59aHFpvPU>

Veterans Health Administration, (2013). *Home Telehealth and Clinical Video Telehealth*. Video retrieved from

<https://www.youtube.com/watch?v=h0Fabmigri4&ebc=ANyPxKoYm_IilIGzM2IXeQZC5idbpVHx6zvSMEEcIY0sArIOAUW65yOvSYl5gwGLUPCpdziZB96psYlxJlfItSuzdVxe7GApEA>

**Web documents**

Bieller, E (2016). How to Design a Mobile App using User Interface Design Principles. Retrieved from

<http://blog.careerfoundry.com/ui-design/how-to-design-a-mobile-app-using-user-interface-design-principles>

Crane, K (January, 2015). *Telepsychiatry:* *The new frontier in mental Health*. US News and World Reports. Retrieved from

<http://health.usnews.com/health-news/patient-advice/articles/2015/01/15/telepsychiatry-the-new-frontier-in-mental-health>

Gruman, G (2013). Heed These 10 Expert Tips for Mobile App Development. Retrieved from

<http://www.infoworld.com/article/2612190/mobile-apps/heed-these-10-expert-tips-for-mobile-app-design.html>

Pratas, A (2013). Designing Mobile Apps: Where to Start. Retrieved from <https://designmodo.com/design-mobile-apps/>

Lisyansky, V (2015). *16 killer design tips for creating mobile apps*. Retrieved from

<http://www.creativebloq.com/app-design/16-killer-design-tips-creating-mobile-apps-11513821>

Rural Health Information Hub (2013). *Rural telehealth capabilities and outreach continue to grow*. Retrieved from

<https://www.ruralhealthinfo.org/rural-monitor/rural-telehealth-capabilities-and-outreach/>

Sandi B (2016) The Basics of Designing Mobile Apps. Retrieved from <http://www.designyourway.net/blog/inspiration/the-basics-of-designing-mobile-apps/>

**Course Requirements**

1. **Class participation (5 points) (meets course objectives #1,2,3,4,5,6)**

Active participation is an expectation of course activities. Active participation is extremely important; your insight and participation in discussions are critical elements of the class.

* Students are required to participate in class;
* Student contributions relate to the topic and are substantiated by conclusions drawn from class readings and discussions;
* Participation also includes group responsibility. That is, each student should remain respectful of all other students and foster a supportive and safe group environment;
* Dominating the discussion is as detrimental to the group experience as nonparticipation;
* Participation means the student: being on time; regularly contributes to small and large group discussions and with such contributions reflecting readings and not just personal opinions; supports participation by all class members; and, raises relevant and complex issues for discussion;
* Electronics can only be used with permission of the instructor and as part of the class lesson.

1. **Online blogging (10 points) (meets course objectives #2,3,4)**

* Access and review information about mobile applications
  + Go to a mobile app site:

<https://play.google.com/store/apps/category/HEALTH_AND_FITNESS/collection/topselling_free>

* + Assess several apps based on the following criteria:
    - What the apps are designed to do?
    - How easy is it to navigate through the apps?
      * How clear is the information provided?
      * How difficult is it to understand the information presented?
      * Does the information detract from the main objective of the apps?
    - How and when should the apps be used?
    - Who should use the apps (target population)?
    - What are the strengths and weaknesses of the apps?
    - What are the benefits and risks of using the apps?
      * Do the benefits outweigh the risks? Why or why not?

MOBILE APP BLOG – **INITIAL BLOG POST** **DUE JANUARY 25 at 11:59 pm**

* + Write a blog (to be posted on Canvas) about 2 apps (one you perceive to be beneficial and another perceived to be non-beneficial). Blog must be between 200 - 400 words. Address the following topics:
    - Brief **description** of each of the two apps
      * What each is designed for and for whom?
    - What are the **strengths and weaknesses** of each app?
    - Why do you **recommend (or not recommend)** each device?
    - What are **ways to improve** the device? (cite class readings/lectures)

RESPOND TO TWO PEERS’ BLOGS – **DUE JANUARY 27 at 11:59 pm**

*Grading: thoughtfulness of responses, demonstrated familiarity with readings, fostering a supportive and safe group environment; and, posting in the time-frame specified.*

***Rubric for Discussion Blog***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Criteria** | **Unacceptable**  **0 Points** | **Acceptable**  **78% of grade**  **2.0** | **Good**  **95% of grade**  **3.7** | **Excellent**  **100% of grade**  **4.0** |
|  |  |  |  |  |
| **Initial Assignment Posting** | Posts no assignment. | Posts late  Adequate assignment with superficial thought and preparation;  Does not address all aspects of the task. | Posts well-developed thoughts that address all aspects of the task;  Lacks full development of concepts. | Posts well developed thoughts that fully address and develop all aspects of the task. |
| **Follow-Up Postings** | Posts no follow-up responses to others. | Posts shallow contribution to discussion (e.g., agrees or disagrees);  Does not enrich discussion. | Elaborates on an existing posting with further comment or observation. | Demonstrates analysis of others’ posts; extends meaningful discussion by building on previous posts. |
| **Content**  **Contribution** | Posts information that is off-topic, incorrect, or irrelevant to discussion. | Repeats but does not add | Lacks full development of concept or thought. | Posts factually correct, reflective and substantive contribution;  Advances discussion. |
| **References & Support** | Includes no references or supporting experience. | Uses personal experience, but no references to readings or research. | Incorporates some references from literature and personal experience. | Uses references to literature, readings, or personal experience to support comments. |
| **Clarity & Mechanics** | Posts long, unorganized or rude content that may contain multiple errors or may be inappropriate. | Communicates in friendly, courteous, and helpful manner with some errors in clarity or mechanics. | Contributes valuable information to discussion | Contributes to discussion with clear, concise comments formatted in an easy to read style |

1. **One-Page Telemedicine Reflection (5 points) (meets course objective #1)**

One-page reflection on Telemedicine:

* What you found most interesting?
* How do you think telemedicine can benefit patient care?
* How do you think telemedicine can improve cost?
  + Please reference the Picot chapters and at least one of the three video source (VA, National Telehealth and Technology or Zang)

**Due February 8, by 5:00 pm (To be uploaded on CANVAS)**

1. **One-Page Mobile App Presentation Reflection (5 points) (meets course objectives #1,2)**

Write a one-page reflection of the mobile app research work and presentation

* What did you find most productive about the process?
* What did you find least productive about the process?
* What new information did you learn that you can apply to the process of developing the full app

**Due February 15, at 5:00 pm (To be uploaded on CANVAS)**

1. **Mobile App Blueprint Presentation (20 points) (meets course objectives #2,5)**

Background

You are required to develop an outline (or blueprint) of a mobile application that will address a health condition.

You will work in groups of four and given **15 minutes to present** your work to your classmates

Some examples of health conditions include (but you are not limited to) the following:

* Test Anxiety Management
* Binge Drinking Management
* Stress Management
* Healthy Eating
* Sleep Management
* Depression and home sickness
* Safe sex
* Another topic of your choice (cleared first with instructor)

The components of blueprint that you will present are the following:

* *A schematic layout of the mobile application*
* Front Page – name of app; category of app (e.g., mental health, physical health); your name
* Settings – how the user will set up the device for his/her specific needs
* About (UI) – what is the app designed to do? Who can benefit from using this app?
* Learn (UI) – background information about the health condition and how the application addresses it.
* *Description of each User Interface (UI)*
  + Describe in text each UI. The written description will be the information that the user of the application will read in order to use the app the correct way.
    - Example: *Settings* – list the different setting of app (audio, video, etc.)
    - Example: *About* – “this app is designed to help first year undergraduate students manage feelings of home sickness…”

Factors to consider when developing blueprint:

* *Include visually stimulating image (this can be obtained using “image” function of Google)*
* *Description of UI must have no more than 10 lines of text per page*
* *Catchy color scheme*
* *Cite source of all external information*

***\*\*Please select one person from your group to forward a copy of your blueprint presentation to the instructor before the class on the day you are presenting\*\****

Below are resources to access other mobile applications for review

iTunes:

<https://itunes.apple.com/us/itunes-u/mobile-applications/id514199160>

Free app site:

<https://play.google.com/store/apps/category/HEALTH_AND_FITNESS/collection/topselling_free>

***PRESENTATION DATES:***

* ***FEBRUARY 11 (Groups #1, #2, #3)***
* ***FEBRUARY 13 (Groups #4, #5)***

***Mobile App Blueprint Presentation - RUBRIC***

|  |  |
| --- | --- |
| ***Criteria*** | ***Points (total = 20)*** |
| *Schematic Layout (Front page)*   * *Visual presentation of UI nodes* | ***4*** |
| *User Interface*   * *Settings* * *About* * *Learn* | ***3***  ***3***  ***3*** |
| *Overall Presentation*   * *Spelling and grammar* * *Not too much text* * *Easy to understand information* * *Full member involvement*   *Execution*   * *Forward copy of presentation to instructor before class* | ***2***  ***1.5***  ***1.5***  ***1***  ***1*** |

1. **Writing Assignment – Telehealth Concepts (10 points) (meets objectives #1,2,3)**

Review the video, TELEHEALTH: How New Technologies Are Transforming Health Care

2015 (Harvard University)

Answer the following questions:

* What is the role of telehealth in healthcare?
* How has technology changed healthcare?
* What value does technology bring to how healthcare is delivered?
* What is the difference between synchronous and asynchronous use of technology?

*No more than* ***one page*** *submission due on* ***FEBRUARY 22*** *worth 10 points, to be uploaded on CANVAS*

***Telehealth/Telemedicine Assignment: RUBRIC***

|  |  |
| --- | --- |
| ***Criteria*** | ***Points*** |
| *Title Page* | ***0.5*** |
| *Introduction – what do you plan to write about* | ***1*** |
| *Questions to be answered:*   * What is the role of telehealth in healthcare? * How has technology changed healthcare? * What value does technology bring to how healthcare is delivered? * What is the difference between synchronous and asynchronous use of technology? | ***2***  ***2***  ***2***  ***1*** |
| *Conclusion* - Brief (4 lines) summary of what you wrote about | ***0.5*** |
| * *Spelling and grammar* | ***1*** |

1. **Mental Health Case Study Description (15 points) (meets course objective #3,4,6)**

Review studies (*posted on Canvas*) of individuals affected by different types of mental health conditions. In your groups, consider how you might use telemedicine to work with the patient identified in the case study. Responses to the case studies will include:

* Brief description of the mental health condition
* How long has the person experienced the condition
* What device(s) will you use to diagnose and treat the condition? Explain why
* How will the patient use the device (Describe frequency of use and explain reasons for selection)
* What will be some benefits to the patient for using the selected devices?

You will submit a 3-5 page write-up of your group’s findings. Please note that although you will discuss the patient in groups, your write-up is individual and thus, should not be an exact replica of the written work of your group members.

***Due by 9:00 AM on MARCH 8th (to be uploaded on Canvas)***

***Case Study Rubric***

|  |  |
| --- | --- |
| ***Criteria*** | ***Points (Total points = 15)*** |
| *Introduction to the Condition*   * *A brief (8 lines) description of the condition* | ***3*** |
| *Answers to the questions*   * *How long has the person experienced the condition?* * *What device(s) will you use to diagnose and treat the condition and explain why* * *How frequent will the patient be seen and explain reasons for selected times* * *What are the benefits for the patient?* | ***2***  ***2***  ***2***  ***1*** |
| *Concluding statement* | ***2*** |
| *Formatting*   * *Title page (title, your name, course name, date, University name – please use sample title page handout)* * *Reference page (list of references use)* * *Spelling and grammar* | ***1***  ***1***  ***1*** |

1. **Application of Full App to Specific Population (30 points) (meets course objectives #1,2,4,5,6)**

 Students will expand the blueprint developed for Assignment #1. Additional components will be: (1) assessment; (2) intervention; (3) results; and, (4) feedback

Students will apply the full blueprint to an identified population. For example, the “Test Anxiety” app can be applied to *first year undergraduate students to manage anxieties*

The full components of blueprint will have the following:

* *A schematic layout of the mobile application*
* Front Page – Name of app; category of app (e.g., mental health, physical health); your name
* *Settings* (UI) – how the user will set up the device for his/her specific needs
* *About* UI– what is the app designed to do? For Version 2, provide a description of the target population who will benefit from this app; Explanation of why target group will benefit
* *Learn* (UI)– background information about the health condition and how the application can help; include informational videos
* *Assessment* (UI) – how will the health conditions be assessed or monitored? (how often is measurement taken)
* *Intervention* (UI) – what is the approach to addressing the health condition (what does the app do? when should the app be used?) [Informational videos can be included]
* *Results* (UI) – a display of pre and post assessment outcomes
* *Feedback* (UI) – automatic text replies? strategic texts? how often? (give examples of texts that user will receive) Describe whether user will communicate with a family member? Care provider?
* *Description of each User Interface (UI)*
  + Describe in text each UI. The written description will be the information that the user of the application will read in order to use the app the correct way.

Students will present blueprint to your classmates on **March 11 (groups #1,2), March 12 (groups #3,4), March 13 (group #5)**. The components of the presentation are as follows:

* Background – include background information of the target population. Present the reasons you selected this group for your mobile app device
* Blueprint - present all components of the app
  + Front page
  + Settings
  + About
  + Learn
  + Assessment
  + Intervention
  + Results
  + Feedback
* Benefits - Discuss the benefits of the app for your target population
* Risks – Discuss any potential risks of the app to your population
* Discuss/describe how the user will interact with the app

Groups will present for 25 minutes plus allow another 5 minutes for questions and answers

***\*\*Please forward a copy of your blueprint presentation to the instructor before the class on (or before) the day you are presenting\*\****

***PRESENTATION DATES:***

* ***MARCH 11 (Groups #1, #2)***
* ***MARCH 12 (Groups #3, #4)***
* ***MARCH 13 (Groups #5)***

***Mobile App Blueprint Presentation - RUBRIC***

|  |  |
| --- | --- |
| ***Criteria*** | ***Points (total = 30)*** |
| *Background – who is target and why selected* | ***3*** |
| *Schematic Layout (Front page)*  *User Interface*   * *Settings* * *About (text explaining what app is designed to do)* * *Learn (text and videos showing how to use the app)* * *Intervention (include videos where necessary)* * *Assessment* * *Results (include figures and graphs)* * *Feedback – text messages* | ***2***  ***2***  ***2***  ***2***  ***3***  ***2***  ***2***  ***2*** |
| *Descriptive information*   * *Benefits for the target group* * *Risk –potential risks to target group* * *Patient Interaction with app* | ***1***  ***1***  ***2*** |
| *Overall Presentation*   * *Spelling and grammar* * *Not too much text* * *Easy to understand information* * *Full member involvement*   *Execution*   * *Forward a copy of presentation blueprint to instructor before the day of presentation* | ***1.5***  ***1***  ***1***  ***1.5***  ***1*** |

**Course Schedule**

**Week #1:**

**January 7 Monday**

**TOPIC: Syllabus Review and Introduction to course**

**January 9 Wednesday**

**TOPIC: Introduction to Healthcare and Technology**

*Required readings and preparation*

* Papers:
  + Herzlinger, R (2006).
* Videos:
  + Kraft, D (2011)
  + McKendry, R (2015)
  + Vandervoort, P (2013)
  + Evans, N (2013)

*Lecture and* Discussion

**January 11 Friday**

**TOPIC: Introduction to Mobile Apps**

Required readings and preparation

* Papers:
  + Istepanian and Woodward (2017) – Chapter 2: Smart m-Health Sensing
* Videos
  + Coleman, T (2015)

*Lecture and Discussion*

**Week #2:**

**January 14 Monday**

**TOPIC: Mobile Apps and Health Research: Part I**

*Required readings*

* Articles:
  + Arsand E, Tatara N, Ostengen G, et al. (2010).

*Lecture and Discussion*

**January 16 Wednesday**

**TOPIC: Mobile Apps and Health Research: Part II**

*Required readings*

* Articles:
  + Carter MC, Burley VJ, Nykajer C, et al. (2013).

*Lecture and Discussion*

**January 18 Friday**

**TOPIC: What makes an app effective?**

*Lecture and Discussion*

**Week #3:**

**January 21 Monday (NO SCHOOL- *Martin Luther King Holiday*)**

**January 23 Wednesday**

**TOPIC: What makes an app effective: Research**

*Required reading and preparation*

* + Students explore mobile app store
  + Students conduct research on several health-based apps they do not currently own

**January 25 Friday**

**TOPIC: Critical evaluation of mobile apps - ONLINE**

*Required preparation*

* + Students write a blog about (2) apps
  + Students describe elements of apps perceived to be most beneficial
  + Students describe elements of apps perceived to be least beneficial
  + Deliverable: Blog on app

***Deliverable: Blog due by 11:59 pm on JANUARY 25***

***Posting on two other bloggers due by 11:59 pm on JANUARY 27***

**Week #4**

**January 28 Monday**

**TOPIC: Designing a blueprint for a mobile app (I)**

*Required reading and preparation*

* Website:
  + Gruman, G (2013)
  + Sandi, B (2016)
* Videos:
  + Locke, M (2014)

**January 30 Wednesday**

**TOPIC: Designing a blueprint for a mobile app (II)**

*Required reading and preparation*

* Website:
  + Bieller, E (2016)
  + Pratas, A (2013)
* Videos:
  + Locke, M (2014)

**February 1 Friday - ONLINE**

**TOPIC: RESEARCH -Designing a blueprint for a mobile app**

* Research a health condition
  + Research on putting app together
  + Research how to structure application

*Lecture and Discussion*

**Week #5**

**February 4 Monday**

**TOPIC: Research designing a blueprint for a mobile app**

Structuring Oral Presentations

**February 6 Wednesday**

**TOPIC: Telemedicine**

*Required reading and preparation*

* Book Chapters:
  + Picot J.(2015).
    - Chapters 1 - 3
* Videos:
  + - Veterans Health Administration (2009)
    - National Telehealth and Technology (2013)
    - Zang, A (2014)

**February 8 Friday**

**TOPIC: Telemedicine – Reflection Paper – ONLINE**

One-page reflection on Telemedicine:

* What you found most interesting
* How do you think telemedicine can benefit patient care
* How do you think telemedicine can improve cost
  + Please reference the Picot chapters and at least one of the three video source (VA, National Telehealth and Technology or Zang)

**Week #6:**

**February 11 Monday**

**TOPIC: Mobile App Blueprint Presentations (3 groups) 20 minutes – 15 + Q&A**

**February 13 Wednesday**

**TOPIC: Mobile App Blueprint Presentations (2 groups) 20 minutes – 15 + Q&A**

**February 15 Friday – Mobile Blueprint Reflection – ONLINE CLASS**

Write a one-page reflection of the mobile app research work and presentation

* What did you find most productive about the process?
* What did you find least productive about the process?
* What new information did you learn that you can apply to the process of developing the full app

**Week #7:**

**February 18 Monday – NO SCHOOL (President’s Day)**

**February 20 Wednesday**

**TOPIC: Special Populations and Telemedicine**

*Required reading and preparation*

Article:

* + Deloitte (2012)

Websites:

* + Rural Health Information Hub (2013)

Videos:

* + VOA News (2010)
  + In Place Medical (2009)
  + Veterans Health Administration (2013)

*Lecture and Discussion*

**February 22 Friday**

**TOPIC: Special Population and Telemedicine – ONLINE**

*Review video:* TELEHEALTH: How New Technologies Are Transforming Health Care (2015)

* Answer questions presented on posted rubric

***Deliverable: 0ne page submission due on February 22***

**Week #8:**

**February 25 Monday**

**TOPIC: Texting and Health Promotion**

*Required Readings*

* Article:
  + Britto MT, Munafo JK, Schoettker PJ. (2011).
  + Strandbygaard U, Thomsen SF, Backer V. (2010).

*Lecture and Discussion*

**February 27 Wednesday**

**TOPIC: Case Studies Analysis**

*Lecture and Discussion – Structuring written reports*

*Group work on case studies*

**March 1 Friday - ONLINE**

Group work on case studies

Group discussion about case studies

**Week #9**

**March 4 Monday**

**TOPIC: RESEARCH – Delivering Mobile App Blueprint to Special Populations**

*Lecture and Discussion – Structuring Oral Presentations*

**March 6 Wednesday – In Class Group Work**

**TOPIC: RESEARCH – Applying mobile app blueprint to special populations (II)**

* Research a special population
  + Develop assessment, intervention and feedback for special population
  + Structure application for special population

**March 8 Friday – Group Research - ONLINE**

**TOPIC: RESEARCH – Applying mobile app blueprint to special populations (II)**

* Research a special population
  + Develop assessment, intervention and feedback for special population
  + Structure application for special population

*Deliverable: Case Study Write-Up*

**Week #10:**

**March 11 Monday**

**TOPIC: PRESENTATIONS (2 groups) 30 minutes – 25 + Q&A**

**March 13 Wednesday**

**TOPIC: PRESENTATIONS (2 groups) 30 minutes**

**March 15 Friday**

**TOPIC: PRESENTATIONS (1 group)**

**Course Grading**

**Class Participation 5 points**

**One-Page Telemedicine Reflection 5 points**

**Mobile Blueprint Reflection 5 points**

**Online Blog (I) 10 points**

**Writing Assignment 10 points**

**Mobile App Blueprint Presentations 20 points**

**Mental Health Case Study Analysis 15 points**

**Special Populations Presentations 30 points**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**100 points**

**Late Policy:**

Five % points will be deducted per day for late assignments including for the online blogging assignment.

## ***Undergraduate Grading Scale***

Correspondence between number grades and letter grades is as follows:

## ***Undergraduate Grading Scale***

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4.0 | 100-98% | A | 2.9 | 87% | B | 1.8 | C- | 76% | 0.7 | D- | 65% |
| 3.9 | 97% | A | 2.8 | 86% | B- | 1.7 | C- | 75% | 0.6 |  |  |
| 3.8 | 96% | A- | 2.7 | 85% | B- | 1.6 | C- | 74% | 0.5 |  |  |
| 3.7 | 95% | A- | 2.6 | 84% | B- | 1.5 | C- | 73% | 0.4 |  |  |
| 3.6 | 94% | A- | 2.5 | 83% | B- | 1.4 | D+ | 72% | 0.3 |  |  |
| 3.5 | 93% | A- | 2.4 | 82% | C+ | 1.3 | D+ | 71% | 0/2 |  |  |
| 3.4 | 92% | B+ | 2.3 | 81% | C+ | 1.2 | D+ | 70% | 0.1 |  |  |
| 3.3 | 91% | B+ | 2.2 | 80% | C+ | 1.1 | D | 69% | 0.0 |  |  |
| 3.2 | 90% | B+ | 2.1 | 79% | C | 1.0 | D | 68% |  |  |  |
| 3.1 | 89% | B | 2.0 | 78% | C | 0.9 | D | 67% |  |  |  |
| 3.0 | 88% | B | 1.9 | 77% | C | 0.8 | D- | 66% |  |  |  |

Correspondence between number grades and letter grades is as follows:

NOTE: 0.8 is the lowest passing grade/academic failure. A grade of 00 means no credit earned

Grading Scale per University of Washington Guidelines, see URL: [www.washington.edu/students/gencat/front/Grading\_Sys.html](http://www.washington.edu/students/gencat/front/Grading_Sys.html) for more information.

**Classroom Behavior**

Students are expected to have knowledge of appropriate student conduct and the UW Student Conduct Code: <https://www.tacoma.uw.edu/student-conduct/uw-student-conduct-code> Students are not allowed to engage in behavior or conduct that disrupts the class or fellow students. Examples include, but are not limited to: talking during lecture, interrupting classmates or speakers, use of cell phones or audible pagers, and use of laptops, which distracts from the material in class. Please be respectful of your fellow students.

If disruptive behavior occurs, the student(s) will be asked to leave the classroom; the excused student(s) will be held responsible for the classroom material. Laptops can only be used with permission of instructor. Electronic equipment can only be used with faculty permission in class. NO TEXTING. No audio recording.

**Disability Statement**

*Disability Support Services*

*If you would like to request academic accommodations due to a disability, please contact Disability Support Services, MAT 253, E-mail:* dssuwt@u.washington.edu*, 253-692-4522, [TDD: 253 692-4413]. If you have a letter from Disability Support Services indicating that you have a disability that requires academic accommodations, please present the letter to the course faculty so the accommodations needed for class can be discussed.* Please contact the DSS reception desk at 692-4522, or visit <http://www.tacoma.washington.edu/disability-resources-students/services-drs-provides>

# *Inclement Weather: Campus Closure/Class Cancellation Policy*

*For information about UW Tacoma Campus closure, call 253-383-4636 (253-383-INFO).* ***Do not*** *call the central UWT switchboard for information about class cancellation. If campus operations have not been suspended, a class may still be canceled, faculty will let students know via e-mail, message on their voice mail, and will leave a message with the Nursing and Healthcare Leadership Program office. If a student still has questions, they should call the Program office at 253-692-4470. Unless there is a message that class is cancelled, assume that class will be held as scheduled. Sign up for e-mail and text emergency alerts at:* [*http://www.tacoma.washington.edu/news/article/stormy-weather-update-inclement-weather-policies*](http://www.tacoma.washington.edu/news/article/stormy-weather-update-inclement-weather-policies)

**Online Technology (See CANVAS)**

The use of online technology at UWT necessitates that you, the student, have the necessary skills to complete all assignments. ***It will be your responsibility*** to check that your personal computer and software do access all online materials in this class. Since you may have different systems, faculty cannot help with computer difficulties related to individual systems. Free software can be downloaded to help (talk to *computer help* on campus).

In order to see if you are prepared for online technology, see this information

<http://www.tacoma.uw.edu/teaching-learning-technology/successful-online-learner>

***Manage your computer*.** You will need a fast, reliable machine and connection to the internet.

* You should have at least **TWO browsers**, as no browser/hardware combination can effectively handle all file types. We recommend CHROME and FIREFOX for all machines; Internet Explorer for Windows; and Safari for Apple.
* **Windows hardware:** be sure your computer is at minimum a Pentium 4 running recent operating systems (Windows 7 or 8).
* **Apple hardware:** be sure your computer is at minimum a PowerPC running recent versions of OS X (10.5 or higher).
* Minimum 2 GB of **memory (RAM)**
* The latest version of **Java** available from: <http://www.java.com/en>
* The latest version of **QuickTime** available from: <http://www.apple.com/quicktime>

There are resources on campus to help with technology concerns. The IT help desk provides the first point of contact for UW Tacoma students needing assistance with technology:

* 253.692.HELP (4357)
* E-mail [tachelp@uw.edu](mailto:tachelp@uw.edu)
* Visit the help desk counter in [WG 108](http://www.tacoma.washington.edu/campus_map/bldg_wg.cfm)
  + - Online <http://www.tacoma.washington.edu/information-technology/contact-information-technology>

You will have to make sure that you can negotiate Canvas in order to be successful. If you have questions about Canvas, please go to <http://www.tacoma.uw.edu/canvas/getting-started>

You can stop at any computer lab and staff will be happy to help you